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THE
ROYAL BOMBAY
SAPPERS & MINERS

1939 - 1947

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THE ROYAL BOMBAY SAPPERS AND MINERS 1939 TO 1947

**Dedicated to all those, whatever their rank, race, caste or
creed, who served with the Royal Bombay Sappers and
Miners between 1939 and 1947**

**Published by
The Royal Bombay Sappers & Miners
Officers' Association**

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Lieutenant-Colonel PS Bhagat VC IE
(later Lieutenant-General PS Bhagat PVSM VC)

FOREWORDS

FROM THE PRESIDENT OF THE ROYAL BOMBAY SAPPERS & MINERS OFFICERS ASSOCIATION

This history is being published by the Association as a tribute to the achievements of the Royal Bombay Sappers & Miners between 1939 and 1947.

The British officers, warrant officers and NCOs who were seconded to the Royal Bombay Sappers and Miners formed a deep bond of friendship and respect for the Indian soldiers of all ranks with whom they served. Since 1947, this bond has been actively maintained through correspondence and by visits to Kirkee by members of the Association who have invariably been hospitably welcomed and have witnessed with pride the achievements of the Bombay Sappers of today.

Compiling the history has been a mammoth task, in which many members of the Association have played a part under the inspiring and enthusiastic leadership of Brigadier Barker-Wyatt. Records get lost, memories fade and sadly many who would have contributed have died. Sources of data have varied from war diaries, articles in the *RE Journal* and other histories, to reminiscences of individual members. An attempt has rightly been made to give the history a human touch by including such reminiscences and thereby catch the flavour of the places, the times and the events. Largely this is the war as seen through the eyes of Sapper officers who were quite junior at the time.

The contribution which the Royal Bombay Sappers & Miners made to the eventual victory - and for two years afterwards - deserves appropriate recognition. I hope that this book will ensure that future historians, the families of the participants and the Bombay Sappers of the past, present and future can read with pride about this chapter in the history of the Group.

Lieutenant Colonel Sir Hugh Neill KCVO CBE TD

FROM THE CHIEF ROYAL ENGINEER

I am grateful for this opportunity to record the great pride of my Corps in the history of the Royal Bombay Sappers & Miners - a history of distinguished service which had its beginnings more than 200 years ago.

The officers, warrant officers and senior NCOs of the Royal Engineers who served with them are proud of the part they played in that history, especially in both world wars. It is worth remembering that the Royal Bombay Sappers & Miners fought in both eastern and western theatres of World War II. The Group was 25,000 all ranks at its peak, fielding fourteen engineer headquarters, fifty-three operational companies and several smaller specialist units - a truly remarkable achievement, especially considering the substantial early losses in Malaya and Singapore.

This book, covering the period from 1939 to 1947, provides a definitive record of loyal and gallant service and is a valuable reference for posterity. It adds another dimension to a tradition of valour with which we in the Royal Engineers have had the honour to be associated.

General Sir John Stibbon KCB OBE

PREFACE

In 1995 a dozen members of the RBS&M Officers' Association attended the celebrations in Kirkee of the 175th anniversary of the Bombay Sappers first adopting the title 'Sappers and Miners'. During a week of parades, colourful events and functions the pride taken by today's Bombay Sappers in their customs, history and traditions was very evident and heart-warming. It was particularly embarrassing, therefore, to realise that no definitive account had been written of the period 1939-1947 in which the Bombay Sappers had contributed so much to the successful conclusion of World War II and the events which followed.

A *Digest of the Services of the Bombay Sappers and Miners* from their origins in 1777 was compiled by Maj GHW O'Sullivan RE in 1895. Further investigations into the history were carried out prior to WW1 and under the direction of Maj M Rawlence DSO RE a *Brief History of the Royal Bombay Sappers and Miners* was produced in 1924. It was extended, to include the period up to 1939, by Colonel LO Clark OBE in 1947. The unexpected decision to advance the date of granting independence to the sub-continent and its partition, did not give the Group HQ Commandant time to commission a proper historical record of the Group's service between 1939 and 1947. However brief wartime histories were produced for the Bengal S&M Group by Lt G Pearson in 1947 and for the Madras S&M Group by Brig RA Lindsell MC in the early 1950s. Both brief histories undoubtedly helped Lt Col EWC Sandes DSO MC to write his *The Indian Engineers 1939-1947* published by the Institution of Military Engineers in Kirkee in 1956. It is regrettable that he did not have a similar source of information regarding RBS&M to help him. It is therefore not surprising that his otherwise most excellent work, lacks some important contributions by the Group to some war and post-war operations.

Major General RM Rau AVSM, a member of the RBS&M Officers' Association, compiled in 1984 his *Tradition of Valour* which covers the history of the Group after 1947 and includes a brief synopsis of *The British Period* including World War II. Our 1939 - 1947 compilation aims to fill the gap in the definitive RBS&M history. We are grateful to Maj Gen Rau for his encouragement and help towards this objective. Had the compilation been started before 1995 many more of those who commanded companies in the field, particularly in the 1940s, could have contributed. However it has produced the valuable memoirs of those who, as junior officers at the time, might otherwise have been more reticent had their seniors been still alive. It is hoped these personal accounts will have lightened the tone of a work which otherwise would have relied largely on the unit war diaries in the Public Records Office, which provided a true, if not very inspiring, base of dates and places.

At the first Association meeting in 1995 to discuss the history project, it was agreed that its main objectives were twofold. Firstly to provide a definitive

record for posterity of the RBS&M's service between 1939 and 1947, for reference in military libraries and future historians; and secondly to help present and future young Bombay Sapper officers and their men to develop an Esprit de Corps and pride in the achievements of their forebears.

As chairman of the small co-ordination committee, I am grateful for all the work done by my two fellow-members, Lieutenant-Colonel DL Jones and Captain EL Norman. The latter undertook, with his wife Cecilia, the immense tasks of final editing and the management of the mapping, printing, binding and general presentation of the book. He also co-ordinated Part I of the history writing the first chapter covering the entire period. Lt Col Jones has not only co-ordinated Part V dealing with the post-war period east of Suez, writing four of the chapters himself (two without direct personal involvement), but has also managed the financial aspects of production and publication. In the latter connection we are indebted to Captain JR Moss CB for his advice and practical help. Lt Col Jones's considerable contribution to the history has continued undiminished in spite of becoming the Secretary of the Association in 1998 following the sudden death of Major FJ Pipe. We are grateful for the work Maj Pipe had already done towards compiling Part III - he had taken part in that tragic campaign, successfully evading capture. We are grateful too to Lieutenant-Colonel WL Sheldon for taking over the compilation of Part III and to Major DC Browning for his readiness on so many occasions to step into the breaches that occurred from time to time. Major AN Fradgley MBE also helped me greatly in the co-ordination of several of the Part IV chapters.

The History could not have been written without the enthusiasm of the chapter compilers, all of whom are named in the chapters they have written and who have acknowledged their debt to their various sources. We are particularly indebted to Lieutenant Colonel HP Munro TD, Major DC Browning and Lieutenants BH Larkins, AS Tweedie and PTC Watson for researching and writing chapters without having had any personal involvement in events they describe. We must thank too those members living close to London, who devoted time to research at the Public Records Office on behalf of some compilers, and all those members who have contributed their memoirs and reminiscences, which we hope have brought a human touch - and sometimes more humour - to the history.

My last, but by no mean least, acknowledgement is to those without whose financial support this might have been written but never published. Apart from the revenue generated by a limited number of sales, our research, administrative and production costs have been covered by generous grants from the Garfield Weston Foundation and the Institute of Royal Engineers. The Association is deeply grateful to them both for their support and encouragement.

July 1999

Brigadier DA Barker-Wyatt CBE

Unit	RBS&M ORDER OF BATTLE FIELD UNITS Formation/ Command	Operational Areas	Chapter
A) Pre War Field Units in Service September 1939			
HQ 2 Div Engrs	2 Ind Div	Quetta	1
HQ 4 Div Engrs	4 Ind Div	Kirkee and in transit to Egypt	1,4
17 Fd Coy	2 Ind Div	Quetta	1
18 Fd Coy	4 Ind Div	Egypt	1,4
19 Fd Coy	UP Comd	Bareilly	1
20 Fd Coy	Bombay Comd	Kirkee	1
21 Fd Coy	Bombay Comd	Kirkee	1
22 Fd Coy	NWF Comd	Kohat & Chitral	1
42 Div HQ Coy	2 Ind Div	Quetta	1
55 Print Sec	Bombay Comd	Kirkee	1
B) Western Theatres 1939 to 1945			
HQ 4 Div Engrs	4 Ind Div	Egypt; W Desert 1940; Eritrea; Libya 41/42; Cyprus; Libya 42/43; Tunisia; Italy & Greece	4,5,8
HQ 5 Div Engrs	5 Ind Div	Sudan; Eritrea; Iraq 41, Cyprus; W Desert 41/42; Iraq 42/43	9-12
18 Fd Coy	4 Ind Div	Egypt; W Desert 39/40; Eritrea; W Desert 41; Syria; W Desert & Libya 41/42 (PoW from June 1942)	4,5,6
20 Fd Coy	5 Ind Div	Sudan; Eritrea; Iraq 41; Cyprus; W Desert & Libya 42; Iraq 42/43	8,10
21 Fd Coy	5 Ind Div (to 42}	Sudan; Abyssinia; Eritrea: Libya 41/42	5,7
	4 Ind Div (from 43)	Cyprus; Libya; Tunisia; Italy; Greece	9,10
27 Fd Coy	6 Ind Div & Paiforce	Persia 41; Iraq; Syria/Lebanon 44	8-12
97 Fd Coy	Paiforce &	Iraq & Egypt 42-43	7
301 Fd Pk Coy	466 Corps Tps Engrs	Italy 44-46	11
(RB unit from 43)	10 Army & Paiforce	Iraq 41/42	7
49 Army Tps Coy	466 Corps Tps Engrs	Italy 44-46	11
3 Bridging Pl	10 Army & Paiforce	Iraq & Persia 41-46	7
53 Print Sec	Corps Tps	Transferred to Bengal S&M 43	
55 Print Sec	Corps Tps	No records	
	Corps Tps	Egypt; W Desert; Libya & Tunisia	
Note: 5 Ind Div (less 21 Fd Coy) transferred to Eastern Theatres May 1943			
C) Eastern Theatres 1940 to 1942 Malaya			
HQ 9 Div Engrs	9 Ind Div	Quetta 40 (formerly HQ 2 Div Engrs)	1
		Malaya Mar 41 - Feb 42 then PoW	13
HQ 11 Div Engrs	11 Ind Div	Kirkee Oct 40	1
		Malaya Apr 41 - Feb 42 then PoW	13
17 Fd Coy	Quetta Commd	Quetta to Feb 41	1
	11 Ind Div	Malaya Apr 41 - Feb 42 then PoW	13
19 Fd Coy	UP Comd	Bareilly Oct 40	1
	9 Ind Div	Malaya Nov 40 - Feb 42 then PoW	13
22 Fd Coy	9 Ind Div	Quetta Oct 40; Decan to Apr 41	1
		Malaya Apr 41 - Feb 42 then PoW	13
23 Fd Coy	Bombay Commd	Formed in Kirkee 40	1
	11 Ind Div	Malaya Nov 40 - Feb 42 then PoW	13
42 Fd Pk Coy	9 Ind Div	Quetta Feb 41	1
		Malaya Apr 41 - Feb 42 then PoW	13
45 Army Tps Coy	3 Ind Corps	Kirkee Mar 41 to Malaya Apr 41	1,13
	9 Ind Div	Malaya Dec 41 to Feb 42 then PoW	13

D) Indian & Ceylon 1942 to 1945 (Field Units serving on operations and specialised training)			
HQ 469 Army Tps	34 Ind Div	Ceylon	2
Engrs (Ceylon)			
HQ Corps Tps	34 Ind Div	Ceylon	2
Engrs (Ceylon)			
HQ 20 Div Engrs	20 Ind Div	Ceylon	2
24 Fd Coy	46 Ind Beach Gp	Amphibious training Coconada	1
25 Fd Coy	Nowshera Brigade	NW Frontier	1
26 Fd Coy	39 Ind Div	Jungle training Hardwar	1
30 Fd Coy	Frontier Brigade	NW Frontier	1
92 Fd Coy	34 Ind Div	Ceylon	2
	32 Inf Brigade	Flood Relief Burdwan	1
95(Mandi) Fd Coy	Frontier Brigade	NW Frontier (RB Unit to Nov 43)	1
96 Fd Coy	Frontier Brigade	NW Frontier	1
99 Fd Coy	42 Ind Beach Gp	Amphibious Training Bombay	1
	CRE Clearance	Bombay Docks reconstruction	1
	116 Indep Inf Brigade	Jungle Training Ranchi	1
411 Para Sqn	50 Para Brigade	Parachute training	1
448 Army Tps Coy	UP Comd	Airfield Maintenance	1
481 Fd Coy	34 Ind Div	Ceylon	2
	Eastern Comd	Flood Relief	1
482 Fd Coy	Frontier Brigade	NW Frontier	1
484 Fd Coy	14 Ind (Trg) Div	Jungle training Chindwara	1
485 Fd Coy	CRE Clearance	Bombay Docks reconstruction	1
329 Fd Pk Coy	CRE Clearance	Bombay Docks reconstruction	1
595 Indep Engr Coy	GE Addu	Maldives	3
596 Indep Engr Coy	GE Addu	Maldives	3
9 Br Pl	Eastern Comd	Flood relief Burdwan	1
88 Br Maint Pl		NW Frontier	1
214 Fd Stores Pl	42 Ind Beach Gp	Amphibious Training Bombay	1
488 Indep Fd Tp	25DG Group	Coconada (Op Zipper training)	1
E) Eastern Theatre Burma 1942 to 1947			
HQ 15 CTE	15 Ind Corps	Arakan	17
HQ 5 Div Engrs	5 Ind Div	Arakan; Imphal; C & L Burma	17 - 20
HQ 20 Div Engrs	20 Ind Div	Assam; Imphal; C & L Burma	15,18,20
HQ 36 Div Engrs	36 Brit Div	Arakan; North & Central Burma	17,19
HQ 457 FAE	GREF & 4 Ind Corps	Assam; Central & Lower Burma	15,19,20
HQ 491 PLO Engrs	GREF	Assam	15,16
24 Engr Bn	5 & 7 Ind Divs	Arakan	17
	457 FAE	Central & Lower Burma	19,20
20 Fd Coy	5 Ind Div	Arakan; Imphal; C & L Burma	17,19,20
24 Fd Coy	17 Ind Div 4 Corps	Burma Retreat; Assam; Imphal	14,15,18
	465 AT Engrs		
Malerkotla Fd Coy	17 Ind & 1 Bur Divs	Burma Retreat	14
	15 Corps Tps Engrs	Arakan (RB Unit to Nov 43)	17
26 Fd Coy	14 Ind Div	Arakan	17
28 Fd Coy	26 Ind Div	Arakan	17
29 Fd Coy	19 Ind Div	Central & Lower Burma	19,20
30 Fd Coy	36 Brit Div	Arakan; North & Central Burma	17,19
37 Fd Sqn	82 (WA) Div & Tk	Arakan	17
	Regts		
91 Fd Coy	23 Ind Div	Assam; Imphal	15,18
92 Fd Coy	20 Ind Div	Assam; Imphal; C & L Burma	19,20
93 Fd Coy	25 Ind Div	Arakan	17

96 Fd Coy	626 Army Tps Engrs	Arakan	17
98 Fd Coy	26 Ind Div	Arakan	17
363 Fd Coy	GREF & 457 FAE	Assam; Lower Burma	15,20
401 Fd Sqn	25 DG Gp	Arakan; Imphal	17,18
	11 EA & 20 Ind Divs	Central & Lower Burma	19,20
402 Fd Coy	457 FAE	Imphal; Central & Lower Burma	18-20
411 Para Sqn	50 Para Bde & 5 Ind Div	Imphal	18
481 Fd Coy	20 Ind Div	Assam; Imphal; C & L Burma	15,18-20
483 Fd Coy	26 Ind Div	Arakan	17
305 Corps Fd Pk Coy			
	4 Ind Corps	Assam; Imphal; Lower Burma	17,18,20
324 Fd Pk Coy	36 Brit Div	Arakan; North & Central Burma	17,18,20
328 Fd Pk Coy	26 Ind Div	Arakan	17
403 Fd Pk Coy	15 Ind Corps	Arakan	17
492 PLO Coy	491 PLO Engrs	Assam	16
493 PLO Coy	491 PLO Engrs	Assam	16
494 PLO Coy	491 PLO Engrs	Assam	16
499 PLO Coy	491 PLO Engrs	Assam	16
495 PLO Pl	491 PLO Engrs	Assam	16
496 PLO Pl	491 PLO Engrs	Assam	16
9 Br Pl	5 & 20 Divs	Assam; Imphal	15,18
	461 Army Tps Engrs	Central & Lower Burma	19,20
11 Br Pl	15 Corps Tps Engrs	Arakan	17
15 Br Pl	461 & 462 AT Engrs	Central & Lower Burma	19,20
215 Fd Stores Pl	Corps Tps	Not known	
217 Fd Stores Pl	Corps Tps	Not Known	
488 Indep Fd Tp	25 DG Group	Arakan	17
201, 202 & 203 Fd	Broadcast Units		
	Probably Corps Tps	Imphal, Arakan	18
F) Operations outside India and Burma initiated post war			
HQ 5 Div Engrs	5 Ind Div	Singapore, Java	21,22
HQ 20 Div Engrs	20 Ind Div	IndoChina	24
HQ 457 FAE	7 Ind Div	Siam	24
HQ 458 FAE	15 Ind Corps (AFNEI)	Java	22
HQ 629 ATE	472 AGRE	Malaya, Siam	21,24
20 Fd Coy	5 Ind Div	Singapore, Java	21,22
24 Fd Coy	46 Ind Beach Gp	Malaya	21
	458 FAE	Java	22
28 Fd Coy	26 Ind Div	Sumatra	22
30 Fd Coy	629 ATE	Malaya, Siam	21,24
91 Fd Coy	23 Ind Div	Malaya, Java	21,22
92 Fd Coy	20 Ind Div	IndoChina, North Borneo	24
93 Fd Coy	25 Ind Div	Malaya	21
96 Fd Coy	HKLF	Hong Kong	25
98 Fd Coy	26 Ind Div	Sumatra	22
99 Fd Coy	116 Indep Ind Inf Bde	Andamans & Nicobars	23
	Force 401	Iraq	27
363 Fd Coy	17 (Austr) CRE	BCOF Japan	26
402 Fd Coy	457 FAE	Siam	24
481 Fd Coy	20 Ind Div	IndoChina	24
482 Fd Coy	6 (Br) AB Div	Palestine	27
485 Fd Coy	629 AT Engrs	Malaya; Siam	21,24
324 Fd Pk Coy	629 AT Engrs	Malaya; Siam	21,24
328 Fd Pk Coy	26 Ind Div	Sumatra	22

49 Army Tps Coy	PAIC/BTI	Iraq	27
217 Fd Stores Pl	Force 401	Iraq	27
489 Fd Stores Pl	46 Ind Beach Gp	Malaya	21

G) Units known to have been created but without information

HQ 43 Ind Armd Div Engrs and HQ 467 Army Tps Engrs
 486 and 487 Fd Coys
 100 and 211 Fd Stores Pls
 419 and 477 Printing Secs
 12, 889, 1026, 1027 and 1028 Br Secs/Pls
 1 Searchlight Engine Room Sec

H) Units in Service August 1947

Up to 1947 most RBS&M companies comprised three different class platoons (PM, Maratha and Sikh). Just prior to Partition it was decided to interchange platoons, to make companies one class units. There was insufficient time to make all the exchanges before Partition and several took place after August. The eventual class is shown in the following section. Some units allocated to India were in Pakistan and vice versa on 15th August and had to move across the Partition borders during September and October.

i) Allocated to India

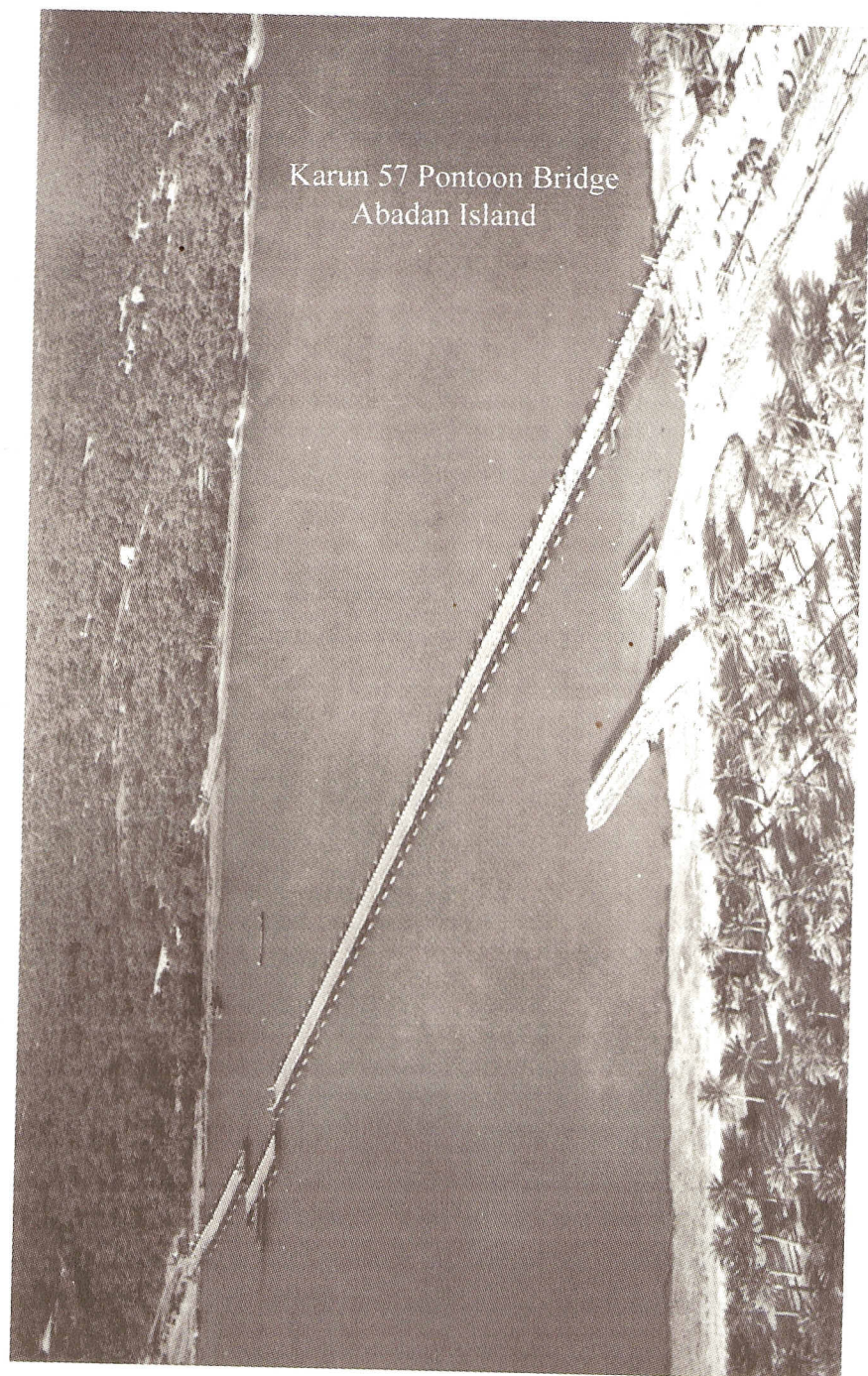
HQ 5 Div Engrs	Sikh	Allahabad with 20 Fd Coy and then 18 Fd Coy
HQ 629 Army Engrs	Mah	Jullundur with 45 Fd Pk Coy
18 Fd Coy	Sikh	Calcutta (renamed from 28 Fd Coy)
19 Fd Coy	Sikh	Rangoon (renamed from 25 Fd Coy)
20 Fd Coy	Mah	Allahabad
21 Fd Coy	Sikh	Ferozepore
22 Fd Coy	Mah	(Renamed from 92 Fd Coy)
37 Aslt Fd Coy	Sikh	Secunderabad with Armd Div
99 Fd Coy	Mah	Kirkee
401 Aslt Fd Coy	Sikh	Nowshera, moving to Merut Sep 1947
411 Para Fd Sqn	Mah	Karachi, to Kirkee Oct 1947, later Agra (50 Para Bde)
45 Fd Pk Coy	Mah	Jullunder
49 Constr Coy	Sikh	Kirkee
55 Printing Sec	Mah	Kirkee

ii) Units allocated to Pakistan (all PM)

HQ 474 Army Engrs		
17 Fd Coy		Renamed from 27 Fd Coy
91 Fd Coy		
98 Fd Coy		Kirkee in Aug 47
42 Fd Pk Coy		Sialkot (renamed from 328 Fd Pk Coy)
411 Para Fd Tp		Karachi, to Sialkot (33 Para Fd Sqn)
489 Indep Store Pl		

Notes: All other RBS&M units raised during the 1939-45 war were disbanded in 1946 and 1947 prior to Partition.

During 1943 all "Sections" in companies became "Platoons", those in "Squadrons" became "Troops", "Independent Sections" became "Independent Platoons" and all the Indian States Forces were transferred to the Bengal Group S&M.



CONTENTS

PREFACE	7
ORDER OF BATTLE	8
LIST OF MAPS	14
PART I INDIA SEPTEMBER 1939 TO AUGUST 1947	
CHAPTER 1 The Indian Scene	18
CHAPTER 2 Ceylon	60
CHAPTER 3 The Maldives	64
PART II WESTERN THEATRES	
CHAPTER 4 Egypt, Western Desert & First Cyrenaican Campaign	70
CHAPTER 5 Northern Abyssinia and Eritrean Campaign	85
CHAPTER 6 Syrian Campaign	114
CHAPTER 7 Paiforce - Persia & Iraq	128
CHAPTER 8 Second Cyrenaican Campaign	148
CHAPTER 9 Cyprus Interludes	169
CHAPTER 10 Gazala to El Alamein to Tunis	175
CHAPTER 11 Italy	199
CHAPTER 12 Greece	243
PART III MALAYA NOVEMBER 1940 TO FEBRUARY 1942	
CHAPTER 13 Loss of Singapore	252
PART IV BURMA	
CHAPTER 14 Retreat	271
CHAPTER 15 Build-up in Assam	283
CHAPTER 16 Pipelines	323
CHAPTER 17 In Arakan	333
CHAPTER 18 Defence of Imphal	417
CHAPTER 19 Advance to Meiktila and Mandalay	444
CHAPTER 20 Recovery & Reconstruction of Lower Burma	493
PART V OPERATIONS OVERSEAS INITIATED POST-WAR	
CHAPTER 21 Malaya & Singapore	520
CHAPTER 22 Siam, French IndoChina and North Borneo	542
CHAPTER 23 The Andamans & Nicobars	551
CHAPTER 24 Netherlands East Indies	561
CHAPTER 25 Hong Kong	583
CHAPTER 26 Japan	590
CHAPTER 27 Palestine & Iraq	602
ESSENTIAL SUPPORT Medical, Technical and Followers	611
HONOURS & AWARDS	614
ROLL OF HONOUR	621
GLOSSARY	636

MAPS

PART I

India	18
North-West Frontier Area	42
Ceylon	60
Addu Atoll	64

PART II

North West Egypt	75
Sidi Barrani Battle December 1940	79
Sudan, Eritrea & North Abyssinia	89
Eritrea and Sudan - Abyssinia Border	93
Keren Battlefield	97
Amba Alagi	107
Syrian Campaign	117
Middle East	128/9
Salum -Tobruk	151
Djebel Achdar	153
Cyprus	169
Gazala Line	177
Gazala - Alamein	183
El Alamein	185
Tunisian Campaign	195
Italy	203
Cassino Battlefield	205
Central Italy & Vandal Operations	219
Gothic Line - 4 Div Breakthrough	229
Maintenance Routes in the Northern Appenines	237
Principal Road Bridges in Central Macedonia	247

PART III

Malaya	251
Singapore 1942	262

PART IV

Burma	272
NE Frontier 1943-44	288/9
Imphal - Kalewa	291
Imphal	298/9
Yu River	307
Pipelines	325
North Arakan	338
Arakan Theatre	347
RuYwa	416
Japanese Imphal Offensive	419
Imphal Battlefield	423
Palel-Tamu Road	425
Shenam Pass	425
British/Indian Counter-offensive	430
Tiddim - Kalewa	453
Imphal - Chindwin River	456
Irrawaddy River - Shwebo	457
Shweli Crossings	461
Shwebo-Mandalay	465
Irrawaddy Crossings	478/9
100 Brigade Crossing	480
Mandalay - Meiktila	486/7
Advance to Rangoon	495
Lower Burma	499

PART V

Operation Zipper Landings	522
Morib Beaches	525
Port Dickson	528
North Malaya	535
Johore and Central Malaya	539
Siam, IndoChina & N Borneo	544
The Andaman and Nicobar Islands	552
South Andaman & Port Blair & Ross Island	554
Java	564
Sumatra	572
Hong Kong & the New Territories	585
Japan & the Pacific	590
BCOF Main Locations	594
Kure	596
Palestine & Iraq	602

PART I

INDIA SEPTEMBER 1939 TO AUGUST 1947

CHAPTER ONE UNITS IN INDIA

Compiled by Captain EL Norman

The history of the Bombay Sappers & Miners during the war cannot be told without reference to the background of its commitment to the Indian scene. This chapter covers an enormous breadth of time, geography and numbers, which has been made possible to record by a considerable quantity of personal memories, but without recourse to official War Diaries which were not usually kept by units serving in India. An endeavour has been made to introduce some chronological sequence, not always successfully, and it is likely other units than those mentioned will have played their part without attracting attention. Indeed one or two may have been phantom in that they had only a skeleton cadre existence possibly for false intelligence. They were usually linked to an equally phantom division or brigade for active 'phoney' signals traffic and other black intelligence dissemination.

At the outbreak of war there were continuing skirmishes on the North-West Frontier, 17 & 19 Field Companies having previously been intimately concerned with that zone and the Quetta earthquake; much later came the Group's contribution to redressing the calamity of the explosion and fire in the Bombay docks. The Bombay Sappers fully reacted to the enormous expansion of the Indian Army for the recovery of Burma and after victory coped with the equally rapid diminution of strength. Finally they prepared for partition, losing almost a third of their post-war numbers to Pakistan, which concludes this history but not the continuing existence of the Group whose customs still reflect the habits of the past. This is all set against the continuing spasmodic civil unrest and with the need for a watchful eye on the North-West Frontier – not to forget the occasional natural disaster.

Recruitment Expansion and Basic Training

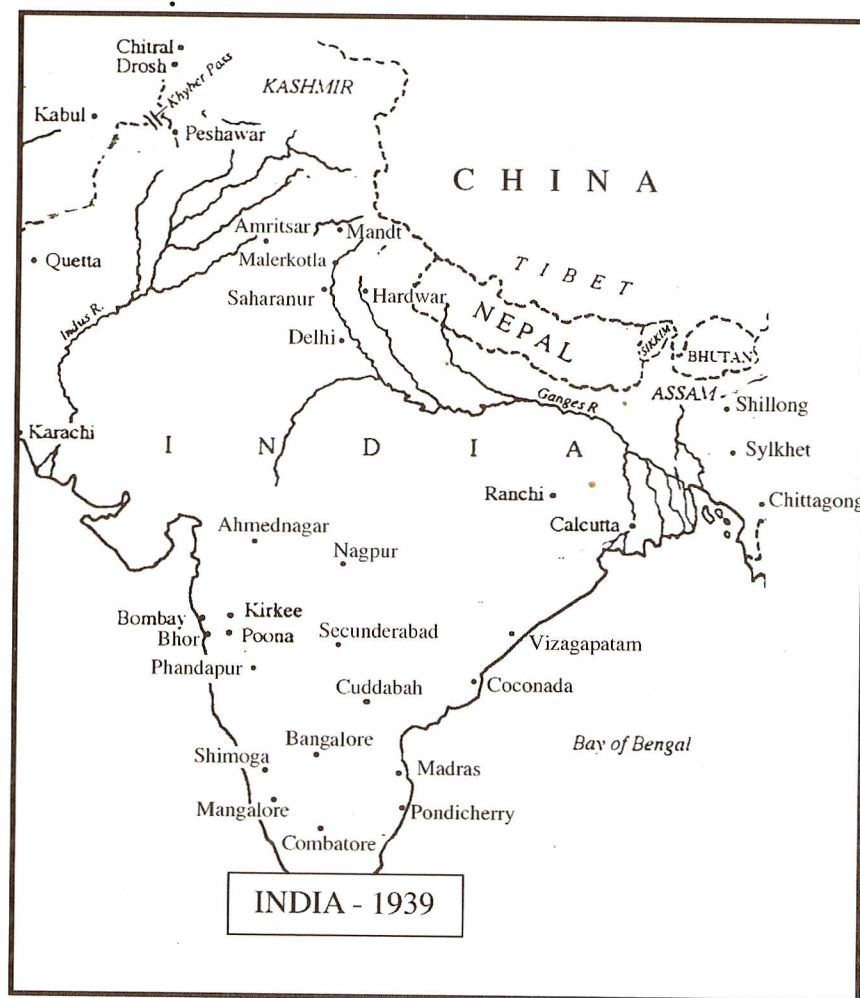
Prior to 1932 each Sapper and Miner Corps was responsible for its own recruitment. Lt Col EWC Sandes describes in his admirable book *The Indian Engineers 1939-1947* how there was no lack of applicants of the very best type to supply the comparatively modest establishments. When recruits were required, a few postcards were sent to aspirants for entry, who would previously have come to HQ (at their own expense) to be medically examined and interviewed. Every man was either vouchsafed for by some relative or connection who was serving in the Corps or was an ex-sapper, so that recruitment was a family affair.

In 1932 this system was abolished and the Recruiting Officers controlled by the Adjutant-General's branch assumed responsibility. Even so the Group continued to do much of its own recruiting. With Japan's entry into the war a vast drive was put in hand with agents touring particular areas where friends and relatives of existing soldiers lived to sign up volunteers, sending them off in batches to HQ to form new companies.

This acceleration in recruitment initially after September 1939, but mainly in 1941, was restricted by a shortage of both officers and equipment. During 1940 a number of Engineer Training Centres were formed throughout India and these soon became sufficiently well equipped where other ranks could be trained in all branches of military engineering. That at Kirkee was under the then commandant Col HE Horsfield, succeeded by Colonel HP Cavendish in September 1942 (see chart at end of Chapter). To give some idea of the numbers involved, the Group had, when war was declared, seven field units – 17, 18, 19, 20, 21 and 22 Field Companies and 42 Divisional HQ (later Field Park Company), together with 55 Printing Section. The strength was 3006. In September 1939, anticipating the rapid expansion, AHQ suggested that new units should consist of one-third from existing units, one-third from reservists and one-third from recruits in the latest stage of their training. Orders were received in 1940 to further increase recruitment, so PM and Mahratta recruits were obtained from infantry units with training companies established at Quetta and Kohat. To cope with the intake, Nos 2 & 3 Training Battalions were formed by the end of 1941 and accommodated at Dighi. New field companies were 300 strong, with 5 VCOs and 3 British Officers normally, organised into an HQ and three sections, each section being further divided into a HQ and three sub-sections. Colonel Horsfield was the driving force throughout this expansion.

Previously when 17 Company returned from the North-West Frontier to Kirkee, Colonel Hamilton had taken over as Commandant and at the beginning of the war Maj Crawford was the officer in charge of workshops. He had been a prisoner of the Turks, having been captured in Kut in WWI and unfortunately he was subsequently captured again by the Japanese, surviving that too. Mechanisation arrived and with it the problem of training drivers. Large numbers of bicycles were requisitioned through Poona contractors and these were ridden along the main road to learn a little road sense. Later country buses were obtained, but these were not particularly reliable after a hard life and the accident rate was high.

Early in 1942 the Bombay Sappers and Miners suffered the greatest disaster in their long record of distinguished service. By the time Singapore surrendered, they had lost two-thirds of their regular units. Yet a strength of over 25,000 men and officers was reached by the end of 1943. In reverse, in January 1946, 2000 had been demobilized, by



October 10,000 and by June 1947 16,519 in all had been released. Such enormous increases and decreases illustrate the elasticity of the bandobust.

The policy of recruiting from three different religious communities into the Bombay Sappers and Miners had with it the automatic corollary of needing to preserve a balance. This could lead to problems. For instance, if a Mahratta blacksmith was required, only a Sikh or Muslim might be available.

Brig JRG Finch recalls at the end of 1941 he took over the newly raised 91 Field Company. The only battle experienced person in the unit was one VCO who had returned from the Western Desert, Sub Narayan Handa. Trying to knock sense into really green troops who had had only six months in the Training Battalion was very difficult. Before the war two years was thought to be a minimum period for recruit training. Moving to Ranchi in March 1942 they had no rifles, no water pumps and no transport except for a solitary air-compressor truck. The young officers hurriedly sent out from the UK included a coal-mining engineer, a ballroom dancing champion and a metalliferous mining engineer. Rumours of Japanese ships going up the Hugli to Calcutta or landing in Orissa province were rife.

To cope with the flood of recruits, obviously more and more officers were required. Early in 1940 OCTUs were established for all three S&M Corps and the intake to the Indian Military Academy at Dehra Dun was increased. Promotion of suitable Indian VCOs to ICO rank was also encouraged. The OCTUs were soon renamed Engineer Officers Training Schools at the three centres. Many of the cadets were Indian, although most were British drawn from the British civil population in India. This source inevitably soon dried up, so parties of British cadets and newly commissioned officers were sent from England.

DJE Hone recalls his trip from the UK in January 1941, sailing on the 13-year old small liner *Highland Chieftain* with about 30 RE officers under the command of Maj KW de Watteville. Also on board were 600 cadets bound for OCTU training in India, whose living conditions below decks were basic compared with those of the officers messing and accommodation despite a doubling up of bunks in the cabins. Urdu lessons were instituted daily with concerts and lectures and of course the "Crossing the Line" ceremony. At Durban, after the welcome respite of shore leave, the drafts were transferred to the *Winchester Castle*. Because of the presence of the German pocket-battleship *Admiral von Scheer* in the Indian Ocean, instead of proceeding straight to India, the convoy anchored in Mombasa harbour for two days to await an extra cruiser for the naval escort onwards to Bombay, where they docked on

4th March. Kirkee was described in the notes handed to young officers arriving before the war "as a suburb of Poona which was about 1½ miles away, a big station by comparison with the HQs of the other two Sappers and Miners Corps, 3½ hours from Bombay, at an altitude of 2000 feet. It was hotish in April and May with a maximum of 108° when it was better for the children to go to the hills, but equable for the rest of the year. Lake and river sailing, rowing, cricket and hunting for small game was available and also polo, hockey, tennis and squash."

Hone's draft of 10-12 officers from the UK was probably about the first to arrive at Kirkee on 5th March 1941. Amongst them were KW de Watteville, HW Kitson and LA Thorpe who had previously served with the Bombay Sappers. Their first night, owing to the lack of other accommodation, was spent under canvas. Black boots, the royal blue lanyard and a topi with the crown badge and the RE flash of the Bombay Sappers were issued. On 6th March a small group of these officers were posted to No 2 Training Battalion at Dighi where the accommodation was also tented, with the mess in a marquee under a large mango tree. This was probably the first time that officers had been accommodated on site at Dighi, some three miles from Kirkee on the River Mule.

Another of the newly arrived officers, GW Launder, arriving off the troopship *Windsor Castle* in Bombay in March 1941, recalls he travelled immediately by overnight train to Kirkee. Still housed in tents, each officer was allocated a bearer and shortly afterwards moved into a bachelor room in "The Kennels" close to the HQ Mess. Promotion came speedily, being appointed Lieutenant 18 months after receiving his commission and then Captain only a month later to take over responsibility for MT training. This was moved from Kirkee to Dighi in June 1941, so he became Company OC as well as chief instructor, acquiring a number of Chevrolet 30cwt trucks and some civilian buses and lorries for driver training.

GT Betts also remembers arriving in Bombay on 22 July 1941 with 21 fellow officers who had spent a pleasant six weeks with no duties apart from supervising the swimming bath on the *Empress of Japan* and having five days leave in Cape Town. After the camaraderie of Britain in the blitz, his first impressions were that the HQ Mess seemed stodgy, the ante-room rather like a dentist's waiting room and any chatter in the mess itself would shatter the atmosphere like breaking a crystal vase. Emergency commissioned officers felt looked down upon by the few regulars present. Of course these were very raw Second Lieutenants with no battle training and no experience of man management. Regular debates were arranged in the Mess, led and opposed by senior officers, although junior officers were encouraged to

suggest subjects such as "This house considers that the time has come to divide engineer officers into two branches, Field unit and Specialist, particularly in view of the number of specialist engineers now in the army" and "This house considers that in view of its role in modern warfare, a Field Company is overburdened with surplus and useless equipment". Officers were warned that anyone might be called upon to give his views to the President.

One of the officers in the Training Battalion when Japan entered the war was Capt Preminder Singh Baghat VC. According to WF Faulds he was seldom around as he was still being feted and lionised by senior army personnel and the civilian hierarchy. Faulds had been posted to Kirkee to attend the Sapper OCTU. As he had been commissioned in the Indian Army following his cadetship at the OTS at Mhow in the State of Indore, he was excused those parts of the course already covered and in exchange had to undergo some regimental duties. The course was run by Maj I Wyn Pugh and Capt Mike Hall.

With the German collapse in Africa it was possible to save passage time to India. The first convoy through the Mediterranean in August 1942 consisted of 14 merchant ships of which nine were sunk despite a very considerable escort. Although losses improved, in a subsequent October 1943 convoy, the *Marnix van St Aldegonde* (a converted Dutch East Indies cruise ship with splendid panelling and furnishings) was torpedoed and sunk, fortunately without loss of life, but slowing down the arrival of a large contingent of subalterns. After a miserable delay in a transit camp at Philipville, a greatly overcrowded troopship eventually completed the passage to Bombay. A minimal course in Urdu on board had given some small introduction to the totally different life they were to find. Coming from many walks of life, with pronounced egalitarian views, their attitude to the jawans was different to that held by many of the pre-war veterans, developing a relationship with the Indian and a deep love of the country and instinctively holding the seeds of future Indian independence in their blood. To place that feeling on record, the penning of this history is a necessity and to confirm the continuing ties with the existing Indian Army.

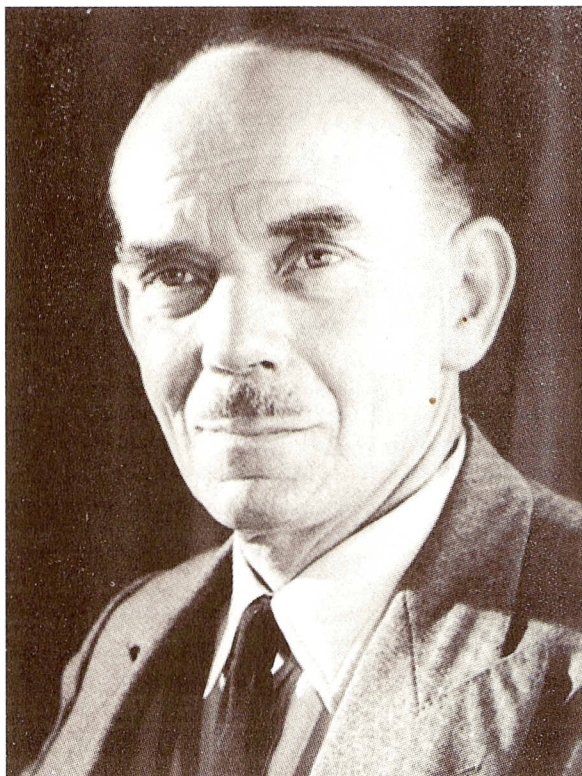
Before posting to units the young officers were subjected to a more intensive course in Urdu, an introduction to army horse drill and care (including how to throw or blow an oversized pill down the gullet - see Appendix), useful for service both in the North-West Frontier and the jungle campaigns. David Hone remembers his munshi as a delightful elderly gentleman, whose knowledge of English grammar and idiom was impeccable. A great betting man and a keen follower of form, he could easily be diverted from his teaching duties by discussions of the likely form of Bombay officers and their mounts at the amateur races.

The first CO when TB2 was transferred to Dighi was Lt Col JB Church, who came out daily from Kirkee as did other officers posted to the battalion. In February 1941 the contractor's workforce with their donkeys were everywhere, mostly completing the roads. Most buildings were complete except for the officers' accommodation and mess. The newly arrived officers were appointed to the six training companies (F6 to F12) despite their limited knowledge of Urdu and Indian Army customs and procedures. The duties mainly consisted of signing many documents, attending pay parades and checking recruits' identities.

The officers' mess, which at first was in a marquee, consisted of very few members in the early days. Friday night was established as "Band Night" when the TB pipeband of five members played for an hour under the mango tree. For a very brief period civilian dress was worn in the evening, but this custom was soon stopped. With the arrival of the monsoon, the surroundings to the tents became extremely muddy and it was with some relief that the new permanent quarters became available on 6th June 1941 for the officers' accommodation and by 20th July for the mess - not before the adjutant's tent had been washed away during a heavy downpour on one occasion. Maj CG Caffin became Mess President and Capt HW Kitson Secretary, the new quarters being named Savoy, Dorchester and Grosvenor in contrast to the more modest designations at Kirkee.

David Young, then a newly commissioned officer, describes how in 1942 he joined 30 Field Company, one of the new companies being formed at Dighi. Maj JPA (Alec) Jackson, an old hand from Eritrea and the Western Desert, was their first OC. The three junior officers were new to the Indian Army and most of the jawans had been in for less than a year, but there were some seasoned VCOs and NCOs. A life of discipline and wearing a uniform - and boots - was a new experience for most of the men, as was substantial meals. The transformation of recruits in a few months was astonishing to observe.

The outcome of the expansion, which reached close on ten times the pre-war strength, was to place an enormous burden on the few old soldiers left at Kirkee. Only by the most strenuous efforts could they recruit and train the men for the tasks that lay ahead. The Commandant was still only a Colonel with responsibilities quite out of proportion to that rank, needing to send trained unit after trained unit to the battle fronts in a seemingly endless stream. Moves to HQ were never popular as troops were sent off on courses and few remained to command - there was also liable to be much interference from the Colonel Commandant. To assist these very few old soldiers in the Training Battalion a 'milking scheme' was introduced, where officers with operational experience were returned to India.



Colonel HP Cavendish DSO OBE Commandant September 1942 - July 1945
(later Brigadier HP Cavendish CBE DSO)

Units in India

BAA (Basil) Plummer was one of these having been pulled back from 18 Field Company when in the Western Desert and was promptly given command of the newly raised 485 Field Company in January 1943. He had been at the RB staff unit HQ 4 Ind Div Engrs as adjutant to both Colonels Cavendish and Blundell, the latter at Alamein.

Matching the increase in officers, in March 1943, a VCO cadet training course was set up in Dighi under Maj M Prichard with Capt GT Betts as adjutant. NCOs from various companies attended and on commissioning, greatly assisted the expansion.

After two years with 29 Field Company GW Launder returned to Kirkee in August 1943 to take over as OC of E2A Company of the Depot Battalion. The company received trained sappers and NCOs from the training battalions and sent them fully equipped with the right kit to units of RBS&M all over the world. All types of uniform were available, from the warm battledress for Italy, to the lighter green for the Burma front. Drafts were sent at irregular intervals, according to instructions from GHQ India, which specified what ranks, trades and religions were required. As a result the size of E2A Company fluctuated considerably. Close liaison with the RTO at Poona Station was needed, for smaller parties were able to travel on a warrant, but larger parties had to be provided with a special coach.

Lt Col EHP (Hugh) Berry recounts the time he was a 2Lt in command of the Sikh troop of 401 Field Squadron which had been formed in September 1942 along with 402 and 403 Squadrons. The three units were earmarked to comprise the Divisional Engineers of 43 Ind Armoured Div, which was forming up at Secunderabad in the Deccan. Maj PG (Peter) Burrell was OC. Time was mostly spent in basic training, range firing and drawing up equipment and transport vehicles. Berry found Dighi a boring and somewhat unfriendly place still then with little permanent accommodation and still with only the messes and latrines of brick. For the officers there was much to learn in addition to Urdu, including the value of the Platoon Jemadar, who provided such an important link with the other ranks.

At one inspection by Brig Cavendish, the Commandant, who was visiting Dighi, accompanied by a fearsome and resplendent tall figure with a well-starched turban and fiery moustache, who was the Corps Sub Maj Taj Din, one of the Sikhs was told to take off his haversack and lay out the contents for closer scrutiny – would he have holes in his pair of socks? Fortunately all was well. The squadron was declared fit to move off to join their Armoured Div at Secunderabad, where units concentrated on training in mine laying and clearance and field engineering services needed to sustain a highly mobile armoured force.

Boys' Battalion

The battalion started in mid-1941 as E6 Company, located in the old Reservists' ground and was commanded by Hon Lt Taj Din. The authorised establishment was 300 and there was no difficulty in reaching that number. The curriculum included PT, education, trades training, athletic sports and a modicum of military training. The Kirkee newsletter of August 1941 reports that many boys put on 14lbs in weight during their first month. The next newsletter indicated an increase to 1000 with a field officer to command it and all the auxiliaries of a battalion.

Subsequently the Boys' Battalion were quartered in the former TB1 lines in Kirkee. In autumn 1945 Capt Leslie-Jones was posted as 2IC and then OC. The battalion moved to the former TB2 lines at Dighi with their officers Bruce, James, Munro, Raschen and Watts. The training began to change to a more general 'Junior Leaders' type as against the previous mostly trades training. Some fieldcraft training was introduced with an experimental two weeks' camp near the semi-hill station of Mahbeleshwar. With increasing numbers it was decided to enlarge the PT ground, which required the removal of a rock outcrop at one corner. Pat Munro recalls that it was a routine 'borehole job' to remove the top layer and indent for the usual PE. The indent was returned "unavailable, gunpowder in lieu". Neither he or his jemadar had used gunpowder, but there was no literature to hand and the rock too big for two sappers with pneumatic drills, they filled each borehole with three inches of gunpowder, constructed a ring main of orange fuse used for booby trap training, lit the fuse and retired the regulation 300yds. The charges went off, showering them with small pieces of rock and a deep respect for gunpowder.

Later Boy NCOs took command of some parades in place of VCOs, notably at an inspection by Field Marshal Auchinleck when their OC was Maj J Preston. A display of physical training was given at a Victory Tattoo held on the maidan at Poona together with a contingent from the Madras S & M Boys' Battalion.

A subsequent OC, Lt Col AB Rhodes was the last British serving officer to leave India in June 1954.

State Field Companies

Two of the state field companies were affiliated to the Bombay Sappers until November 1943, when all the companies were administered from Roorkee and therefore became Bengal Sappers. One of these units was 95 Mandi (Independent) Field Company, which was the only Dogra Field Company in the Indian Army. WO JE Butler remembers being posted

to them while they were stationed in Peshawar in September 1942. He joined when their OC was Maj AP Smith and 2IC Capt Tilden-Pattenson. Lt Yashodan Singh was the Rajah's son. Moving to Razmak in Waziristan to do duties with Razmak Brigade on road open days, this involved sending patrols along the road between Bannu and Razmak to keep the tribes from attacking convoys. From Razmak they moved to the Sind desert, where martial law had been declared after a terrorist, the Pir of Pagoda, had derailed trains and murdered several officers. His followers, the Hurrs, took any young woman they or their leader fancied, did as they pleased, then killed them. The company carried out engineering work such as digging and shuttering wells for the concentration camps set up to house the terrorists. The Pir's hideaway in the desert had been located and James Butler went to survey it for demolition. "It was protected by a high wall with watch towers on each corner. Our 15cwt truck became stuck in the sand near the entrance and was only freed with much effort. Inside was a huge house and on the first floor a large room surrounded by small alcoves where he kept his women under lock and key until required. In the centre was a large circular leather pouffe the size of two double beds. Thousands of glass bangles littered the place and there were magnificent carpets, with the result that most of the jawans adorned themselves and many of their tents sported a carpet for extra comfort. A few days later the Police Chief asked for a long metal rod with a pointed end to go treasure hunting as a result of information received. The Chief found enough blocks of American bullion silver to fill three trucks from exactly where our 15cwt had become bogged down. Returning to Razmak their OC changed to Maj BG Rawlins and they went on to Vizagapatam on the east coast to build an underwater storage shed for use by submarines. This entailed working three miles out to sea when tides permitted off a sand spit. The unit was 'mysteriously' transferred to the Bengal Sappers, reputedly to simplify administration and training of all state companies."

The other Bombay affiliation – the Malerkotla Field Company – served for some time in the Arakan (See Part IV). The company could claim direct lineal descent from the Cavalry and Infantry of the ruler of the Punjab hill state, Malerkotla. It was first reported in action as early as 1446 and subsequently fought under General Lake at Leswarree in 1803. After earning a further six battle honours, the unit was reorganised as Imperial Sappers and Miners in 1892, since when many battle honours have been added, including Waziristan. The company was affiliated to the Bombay S&M whilst stationed in Nowshera prior to moving to Burma.

Unit and Specialist Training

A number of units spent some twelve months in India between their campaign activities. They were likely to take part in various types of operation while 'at home', eg civil disturbances, defence works on the east coast, general construction works at bases and depots, repair and

maintenance works for military roads, railways, airfields and ports. Others may have been involved with specialised unit training – armoured, amphibious, airborne etc.

The Possible Japanese Invasion

Several companies were involved in preparing for a potential Japanese invasion. 29 Field Company was raised in October 1941 under their OC Maj (later Brig) AP Lavies, mainly with recruits. Forming part of 17 Ind Div, in early 1942 the unit was sent to Madras in view of the imminent threat of invasion on the eastern seaboard, to build defences in and around the city. The government had been evacuated to Bangalore, so that Madras itself was largely deserted. Japanese strategy was to destroy the British Eastern Fleet and to establish naval and air bases in Ceylon to disrupt communications between UK and India and the Middle East. On Easter day Colombo suffered a severe air attack and on 9th April a second devastating attack took place on Trincomalee. During this period a Japanese naval force sank 28 merchant ships and generally these enemy activities caused panic among the Madras civilian population and a raid was expected. 2Lt WB Harris had by then joined the company as Reinforcement Officer and he recalls preparing to carry out defensive demolitions partly using commercial explosives imported for the Kolar goldfields. All the large oil tanks had to be prepared for demolition, supplies of cable etc had to be foraged, sometimes at the point of a gun from shops that remained open. Guncotton slabs were placed at the base of the tanks with a raw sapper sitting by an exploder. After a time – with the detonators in the guncotton – the state of readiness was reduced much to the relief of the oil company management. Eventually all quietened down and the company reverted to exercises.

In March 1942 29 Company moved to Ranipet, west of Madras City. Still under the threat of a Japanese invasion, they were given unlimited powers of local purchase (from sandbags to expensive machinery). The 2IC Capt GW Launder without any limitation as he thought, bought ten tons of gelignite. This was above the powers of even the CinC India to pass the bill – he received a very nice letter from GHQ Delhi telling him to restrict purchases to five tons at any one time in future. By August there was much civil unrest and with the railways threatened with disruption, the company moved to Renigunta to patrol the line between Cuddapah and Arkonam. They had their own train and a magistrate to deal with anyone trying to damage the track, but the only incident involved a small boy trying to steal a metal sleeper, who got away with the magistrate giving him a strong warning.

Following the departure of Maj Lavies in early 1943 Maj AP Nanda became OC for a few months, when Launder was promoted to Major and took over for

a month before in his turn handing over to Maj A Dowse. There then followed a period of intense training prior to becoming involved in Burma from October 1944 onwards. This included wet and dry bridging on the River Adyar at Kilacheri and then to a jungle training camp at Sacrabyle near Shimoga in western Mysore State. Each platoon had to design and build their own bridge across a deep nullah using only such materials as trees and bamboo available in the immediate vicinity. The course also covered moving around and living in thick jungle, co-operating with a Forestry Company which had its own elephants.

Jungle Warfare Training

In August 1943 two Training Divisions had been formed. These were 14 Ind Div with HQ at Chindwara and 39 Ind Div located at Saharanpur in the United Provinces. The Engineer Groups sent small parties of recruits who had already completed their training at HQ to one or other of these divisions. At Dighi a Training Wing of 3 battalions existed, each battalion having six companies and a HQ company with an intake to each of about 120 recruits a month. It was necessary to switch the system of training from catering for the North African or Italian theatres, to that needed for Burma. So the semi-trained recruits were despatched to the Indian Engineer units serving with the Training Divisions, to finish their training under the guidance of instructors experienced in jungle warfare.

The 39 Ind Div Engineers were based in the foothills of the Siwalik Hills just outside Hardwar on the Ganges and provided, according to the then adjutant (later Maj Gen) Peter Shapland excellent jungle training. Maj C Baillie was OC of 26 Field Company in Ranchi on their return from the Arakan when they heard they were to move to Hardwar. He voiced strong feelings to Gen Slim that the company should be reduced to training status, but the commander's opinion was that as there were so few with jungle experience it was a sensible move. Despite this most of the experienced men were lost to combatant units. Col Jim Corbett, one of the most exciting men Chartres Baillie said he had ever met, visited the company to lecture on increased jungle awareness. Soon the company came under the command of Maj FWW Wyatt who had brought his wife and two of his younger children with him to live in the jungle.

The company's role was to take fully formed platoons, complete with their officers, VCOs and NCOs for jungle training. They were exercised in jungle awareness, opportunity target shooting and mine lifting. MT personnel were taken on driving exercises mostly on longish convoys to many of the important cities in the Punjab, giving the young subalterns a marvellous opportunity of getting to know that part of India. On completion of some 6-8 weeks of training, each platoon was sent

usually to the rear echelons of the 14th Army. The company was officered by a number who had previously been involved with the jungle, such as Moss, Healy, Blake, Oxley and Story, but later officers straight from the UK via Dighi arrived such as Dunkley, Pain and the compiler of this chapter with only brief courses behind them at the Mangalore Jungle Training School.

The merging of the three communities was just beginning, but messing back at camp was still very much an individual platoon by platoon by platoon operation*. Officers of the PM platoon were occasionally invited by the other platoons to their end-of-course celebrations and the Sikh efforts to compensate for the non-alcoholic regime of the PMs, by regaling with drink and bhang impregnated pakhora, gave an interesting insight into the social differences between the classes.

The other centre for jungle training was at Bhimalgondi and Kandlai where the 14th Ind Div was sited with their HQ at Chindwara in the Central Provinces near Nagpur. 484 Field Company was raised at Dighi by Maj (as he then was) PS Bhagat VC and was posted in mid-1943 after only basic training to this area of mainly teak and bamboo jungle. This wood provided the raw material for bridge building. *The Biography of General Bhagat* recounts a number of incidents relating to 484 Company in this period, there being many to relieve the monotony of repetitive exercises.

For example, watching monkeys who had discovered that by pulling the trip wire of a booby trap, it would be accompanied by a loud bang much to their delight. Maj Bhagat, according to one of his platoon commanders, John Kerr, always visited the jungle camps at some time during each training period, usually when the bridge building exercise had been completed. When told the bridge had been designed for a particular class, he ordered a vehicle of the class above to be driven over to prove the design and ensure that a safety factor had been included. In Bhagat's usual laid back manner, he never called for calculations, merely carrying out a visual inspection before final approval. Maj Duncan took over the company for a short time, following which, Capt Betts took them back to Dighi for disbanding in March 1946.

A further centre at Shimoga in West Mysore provided intensive training for 29 Company with 19 Ind Div for two years. This gave them experience under monsoon conditions of surveying and constructing roads and bridges through hilly virgin jungle, such as building a 40ft span bridge capable of supporting a 15cwt truck solely using freshly cut green bamboo. Elephants were used to carry

FOOTNOTE *Although by then the PM's had left the Group, it is worth noting that common messing was introduced at Kirkee early in 1949.

equipment and clear the way. Combined operations training followed on the coast south of Bombay and at Kharakvasla and the value of this long period of training became evident during the advance into Burma according to Capt Harris, who had become 2IC for about a year before returning to Kirkee mid-1944. OCs included Maj Lavies who left for Staff College, Maj AP Nanda the former adjutant and Maj AK Dowse.

In contrast units serving in the Iraq theatre were also getting ready for transfer to Burma. JEWTS were introduced – Jungle Exercises without Trees.

Beach Groups

In July 1943 the Indian Expeditionary Force was formed with operations overseas in view. It included five Beach Groups to assist the assaulting troops across the beaches and to maintain them subsequently. Bombay Sapper units were among the substantial engineer content of these Groups, the role and composition of which are explained in Chapter 21. Two of them played a major and essential part in the landings in Malaya in and 46 Beach Group contained two Bombay Sapper units. Several other Bombay units crossed those beaches with or after the assaulting troops and these too had carried out amphibious training previously in India at Mahd Island near Bombay, at Coconada, at Lake Beale near Nasik and at Lake Khadakwasla near Poona.

99 Field Company and 214 Independent Stores Platoon were part of 42 Beach Group. They were warned for participation in an amphibious operation against the Japanese-occupied Andaman Islands in December 1943. 99 Company had already despatched the PM platoon under Lt KB Francis to Calcutta as an advance party, when the operation was cancelled – too late to prevent the platoon being sent to the Arakan as part of 36 Divisional Engineers for six months. The company returned to Bombay, resuming amphibious training, so were immediately available to assist following the Bombay Docks disaster (qv). While the company were in Bombay, 42 Beach Group disbanded, so on completion of their task in the docks, the company joined 116 Independent Indian Infantry Brigade in Ranchi, ironically helping to recover the Andaman Islands in October 1945 with them (See Chapter 23).

Coconada

After reputedly walking out of Burma/Malaya for the third time, 24 Field Company returned to Dighi at the end of 1944. Maj Oxley took over command with Capt Walsh 2IC and Lts Downie, Feather and Henwood as platoon commanders. Rigorous training under the permanent Dighi instructors followed in mine clearance and various

types of road building from Sommerfield track to combination sandwiches for use across beaches and muddy areas. This was followed by a period at Madhi Island near Bombay, adding assault landing to the training. By June 1945 the company were ready to join 46 Indian Beach Group at Coconada and eventually onwards to the marshalling area at Madras for embarkation on the *Glenroy*, the headquarters ship for the Zipper landings to invade Malaya at Morib on the east coast. Irwin Feather confesses that his only remembrance of this period was the Temple of Love at Coconada, a monument adorned on the outside with ninety-six exotic sculptures and inside walls with large pornographic paintings. The 489 Independent Field Stores Platoon were also part of the 46 Indian Beach Group at that time.

Coconada had been chosen for its suitability for amphibious training, but had few other attractions, the Temple of Love apart. Hugh Berry's Sikh troop had been divorced for some time during the Burma campaign from its unit 401 Field Squadron and was re-designated 488 Independent Field Troop. Their tasks included the construction and operation of a 60ft Braithwaite tower-tank for tank crew training for under-water escape drills; the construction and operation of mock-up LST ramps for training tank crews in launching drills in deep water; and the construction and operation of a small camp facility on an off-shore sandbank for daily use by the crews training. By the end of August 1945 there was no further need for the No 3 Combined Operations Training Centre and 488 Independent Field Troop returned to Kirkee for disbandment.

Similarly 402 Field Company only spent a short period training in Coconada. According to Walter Faulds they became part of the newly created unit 457 Forward Airfield Engineers with the responsibility for reconnaissance and planning of selected forward (captured) fields and providing such field engineering as was needed to ensure the airfields could be put to early use by bringing in aircraft for transporting supplies and for fighters to give air cover. The intention was that they were to have personnel trained in glider borne operations with individuals trained as parachutists. Although the training was not arduous, it was good for general morale, as they felt they were a special unit with a specific and recognised task when they rejoined their company in Burma. Maj MacLaurin and Lt Faulds were chosen to take a selected number of the company to the Rawalpindi parachute school. The remainder departed to Ranchi for further training in the revised equipment needed for packing and loading into gliders. This involved the use of timber sledges on to which the equipment was secured so that the forward thrust of their weight on landing would pull up the nose of the Hadrian Glider being used. The equipment would then slide into the open for easy access.

596 Field Company had moved back to Kirkee in March 1945 where they were to be turned in to a stores company. Their OC was Maj RG (Bud) Narayan with Capt SG (Stanley) Baker as 2IC. However they were posted for training in a former Chindit jungle training camp near Jhansi within the ambit of 458 Forward Airfield Engineers when they were posted for training in a former Chindit jungle training camp near Jhansi. After clearing the jungle and building an airstrip, they were told that they would be glider-borne to build an airfield in Burma, but before going the war ended. Instead, over Christmas 1945 and the New Year, they were in Multan in what is now Pakistan, building a POW camp which, when completed, was used for housing JIF's during a series of courts martial.

No obvious reason has emerged in the numbering of the various units as they were formed. GHQ established the numbering with batches allocated to different groups and types of unit. Thus the 20s and 90s were Bombay Field Companies, the 300s Field Park Companies of all groups, the early 400s squadrons, the later 400s Line Of Communication and Forward Airfield Engineers and the later still 400s were Pipeline Companies.

Parachute Training

411 Parachute Squadron was formed originally as a Parachute Section in November 1941 under Capt MJJ Rolt as a component of 50 Ind Para Brigade. It comprised a mixture of volunteers from both the Bombay and Bengal Groups and as there were a greater number of Bombay sappers, it became an RBS&M unit. The basic parachute training was carried out at the Parachute School at Delhi's Willingdon Airport, which was a small grass field alongside the Race Course with a couple of hangars. The School was equipped with three two-engined Vickers Valentias biplane bomber-transports. These had an enclosed cabin for 10/12 passengers with the pilot and co-pilot in the nose in an open cockpit. An oval hole the size of a large tin bath had been opened in the floor. The dropping zone was a ploughed field near Palam village where Delhi International Airport now is.

In November 1942 the Brigade moved to a hutted camp at Campbellpur, between Rawalpindi and Attock. Training was resumed with Wellingtons and Dakotas, with which latter the great bulk of training was done at the Parachute School at Chaklala near Rawalpindi. Dropping height was fixed at 250ft which was theoretically high enough to ensure parachutes would open, while giving the least time for being potted at by the enemy. The theory did not work out as, due to parachutes not opening properly, several fatal accidents occurred and the dropping height was increased to 500 feet. This decision was particularly

welcomed by the unit commanders, who were expected to make a 'pep' jump to show how safe it was. It was left to the Squadron to decide what training they should undertake, as the engineer tasks were ill defined. Throughout 1943 hopes of an operational role rose and fell. Plans for a variety of possible operations were developed, specialised training was carried out and then the plans would be abandoned in favour of some new possibility. In March 1944 the hopes of an airborne operation was finally extinguished with the news of the Chindit expedition and the realisation that it would absorb all available air transport. They were ordered into the Imphal area in a ground role. (See Part IV)

The original section only had some 60 all ranks and did not grow to a Squadron until June 1943, which was when the Mahrattas were recruited as Sikhs could not be used for parachuting because of the considered danger of their hair becoming entangled with the shroud lines when opening. Also they refused to wear a parachute helmet instead of their pagris so 411 Squadron contained only PMs (one troop) and Mahrattas (two troops and HQ).

When the siege of Imphal was lifted and with the elimination of the Japanese threat, 50 Para Brigade returned to India. 411 Squadron found themselves back in India first in a huttet camp at Gujar Khan, just off the Grand Trunk Road as part of 44 Ind Airborne Div, which was in the process of formation. This division shortly afterwards became 2 Ind Airborne Div and was one of only three Indian divisions which never saw action as a complete division. They were to join with two American airborne divisions to go to the Japanese mainland, but the plans were aborted following the two atom bombs and the sudden surrender of all the Japanese forces. In March 1946 411 Squadron moved to Malir, some ten miles north of Karachi. Their time was mostly occupied with building married quarters out of home-made bricks. The only bridging was to build a Bailey as if it had only limited access on the home bank, using a D4 bulldozer as a counterweight. Close by was an airship hangar that had been built for the ill-fated R101 on its maiden voyage to India. It subsequently crashed at Beauvais in the 1930's. Getting on to parachute training courses at Chaklala was a protracted business in 1946 when all the British units were withdrawn and all the parachute battalions were being replaced with Indian Army units, as were the Royal Artillery and parachute courses were in much demand. Pat Munro (later Lt Col HP Munro TD) recalls waiting for four months to go on the basic course and when he left the unit in October 1947, there were still some jawans who had not been able to attend. The aircraft could not be spared and only a few 'refresher' non-exercise jumps were available.

Later in 1946 411 Squadron had to reduce to their peace-time numbers. About 50 other ranks had to go back to Kirkee, which was a heart-breaking decision, for it seriously effected pay. Whereas a jawan in the parachute company was paid about 25 rupees a month extra, in Kirkee he would only receive his basic soldier's pay of around 30-40 rupees. The extra had been paid as to fifteen rupees in cash and the remaining ten kept in a reserve fund for payment when the soldier ceased to serve. When some of the men returned to Kirkee, they had been ordered correctly to give up their red berets, but there was no right to require them to remove their parachute wings. After an awkward interview with the CO Depot Wing, telling him this was wrong, he eventually agreed.

Internal Security and Civil Disturbance

Civil Disturbance

Faulds' days at EOTS were abruptly ended when told to report to the Officer Commanding Troops Poona, the RBS&M Commandant Colonel Cavendish. Faulds remembers him standing alone outside the Fort at Poona, armed only with a swagger stick, no troops and addressing a crowd and being subsequently stoned. Gandhi had been re-arrested on 9 August 1942 and incarcerated in the Aga Khan's palace near Poona and it was expected that the general campaign of civil disobedience would be centred round the city. The Bombay Sappers were responsible for the protection of the city and had their HQ at the Fort in its centre. This was a magnificent place with the main walls surrounding a large courtyard. The buildings were entered through an arched opening fitted with heavy solid wooden doors having enormous spikes protruding to deter any charge by elephants. Inside there was an ornamental pool and on occasions when the troops inside the fort made sallies outside to snatch agitators, they would then be placed in the pool up to their waists for a number of hours before release, if the crowds had left. If the crowds persisted and were getting out of hand, a magistrate was sent out to read the Riot Act with an army officer in attendance. It was the magistrates to decide if the crowd was getting out of control, when responsibility was handed over to the army officer to disperse the crowd. The situations were very treacherous, because the magistrates could never be completely trusted, some of them being totally devoid of any character or courage. Many tried to leave the scene without signing the official chit needed when handing over to the officer.

"I was" Faulds recalls "advised to ensure that I kept two competent sappers close to me, one to grab the magistrate before he could run away and the other a good marksman who could be relied on to shoot the ringleaders if I thought it necessary. It was dinned in to me that

this was the only way a potentially angry mob could be kept from exploding into chaotic violence." Shortly after this he was sent to take charge of a small squad guarding a Burma Shell Depot in the City. They surprised some men trying to set fire to the Police Chowkies beside the depot and fired on them, killing two. He was immediately removed, partly for his safety, but also to keep him away from the press and subsequent exposure to the mobs. Just to lose empty cartridge cases on the range was a crime involving a great deal of paperwork, let alone in such a politically sensitive period, a killing. So he was spirited away in the best army manner to Bombay to wire up the sluice gates serving the water supply to the Bombay power stations.

John Moss and Peter Whitely recall the value of the early grounding in Urdu. Despite their age, then only 22 & 21 respectively, newly commissioned and just posted to 98 Field Company, they found themselves sent with their PM and Mahratta platoons to prevent any rioting crowds from freeing the prisoners from Yeravda jail. Poona then was contained by the Mula Mutha River, the whole city lying close to the river bank. On the opposite side were several large houses including the Aga Khan's so-called palace, which could only be reached by a single bridge. Mr Gandhi had begun a hunger strike on 10 February and were he to die, the Poona mobs were expected to cross the river, demanding his body to be taken in procession, which was not to be permitted. Also the expected mob of 10,000 would attack the jail to free the prisoners. As the only two available subalterns, Moss and Whitely were given the task of preventing this. It was intended that Bren carriers should be used in a show of force if the crowd broke through the thin cordon of civil police – but they were not to engage. If the crowd remained undeterred minimum force was authorised with the use of Bren guns, but how many rounds were needed for a minimum deterrent? Fortunately Gandhi, on 1 March, decided to take orange juice and the question did not arise, but it was a heavy responsibility to place on youngsters.

98 Company's previous assignment had been a two months' spell of railway security duty, protecting the Great Indian Peninsula Railway from south of Dhond to some 30 miles south of Sholapur against sabotage. The platoons alternated between the tiny wayside halt of Polmalwadi and the plum posting at Kirduwadi Junction, where the main line was joined by the Barsi Light Railway, a narrow gauge privately owned line which existed mainly to carry Hindus the 40 miles to the important pilgrim centre at Pandharpur. The Company was run by four Europeans who adopted the subalterns with extreme kindness and generosity, and the private coaches in which they travelled were comfort itself in wartime India. As Whiteley says "these two months were of immense value, as we were exclusively in the company of our platoons, so that Urdu improved dramatically, as did our knowledge and understanding of the men as individuals" They were on their own, in command without recourse to senior officers and the mutual respect and liking resulting, was of the greatest value when the company finally arrived in the Arakan.

A little later in the autumn of 1942 Moss was ordered with his platoon to Mahad, a small town on the other side of the western ghats from Kirkee. There had been rioting and the military was sent to aid restore peace and quiet. "As soon as we reached Mahad we were to seek out the civil magistrate, but he was apparently in the hands of the rioters. So we fixed bayonets and marched down the main street with the rioters exiting at the far end. There the 'incident' ended. However as we possessed no radio and with all the telegraph wires down, it was impossible to pass the good news back to Poona." Moss was ordered to go to Bhore, one of the small Deccani princely states, which seemed likely to be the nearest place where the telegraph might be functioning. The rajah had a wooden palace in the main square of Bhore town, with a Hindu temple opposite and the telegraph office just round the corner. As it was a small state, the rajah kept only one elephant – a large one, the elephant being the principle prop of Indian state pageantry. Setting off with Hav Siwant Shitole, some sappers and a motor byke in a three-tonner, the party hit a flooded section of the road. It was decided that the three tonner could not go on, so two poles were lashed on each side of the byke to carry it across. In order to get the havildar and the sahib across without them getting soaked, Spr Siduppa Agne, a very strong Mahratta, ferried each across on his shoulders and the sappers waved them on their way with Moss riding pillion. Turning a sharp corner they came face to face with the rajah's elephant, taking its morning exercise. Lifting its trunk over its head and standing on hind legs the elephant looked very large and menacing. The havildar immediately opened the throttle and the pair shot forward and under before the elephant could get his feet down. The telegraph was indeed functioning and the message was sent, the party getting back to Mahad in time for khana.

411 Parachute Platoon were also involved with civil disturbances in 1942 in Delhi, with a detachment billeted in the Chandi Chowk police station as were 29 Company in Madras, where the Congress party caused widespread disturbances and violence. Police stations were set on fire, communications sabotaged and for a time the company patrolled part of the main rail network, with each patrol travelling in a single coach drawn by a large steam engine travelling in advance of each express.

David Money also recalls while he was with 363 Chemical Warfare Company how he wired in the Aga Khan's palace, which had extensive grounds, deer and relics of visits of the Prince of Wales and Mrs. Simpson – indeed a luxurious 'prison'.

The Bombay Docks Disaster

Whilst the majority of the time that units were in India was spent in training or recovery between different theatres of war, a number of important events occurred to involve sapper and miner units. Probably the most important of these was the involvement of 99, 329 and 485 Field Companies in the reconstruction of Bombay Docks following the

disastrous explosions aboard *SS Fort Stikene*, which set fire to much of the Port area in April 1944. Previously 99 Company under Maj DN Wilson had constructed camps for either prisoners-of-war or political internees just outside Poona, repaired bridges and then undertook amphibious training first at Karakwasla and then in the Bombay area as part of 42 Indian Beach Group to support amphibious operations. This was to be effected by assisting assaulting troops across the beaches and setting up, organising and maintaining the Beach Maintenance Area to support the landing until a break-out from the beachhead. The company took part in one sea-borne exercise down the west coast of India, experiencing life on board ship, scrambling down nets into landing craft and carrying out sapper tasks on the beach and beach exits. They were to take part in an intended operation against the Andamans, but higher priorities for resources with the situation in Burma by then, meant that the operation was cancelled and the company found itself in Bombay to resume amphibious training, when the 12th April disaster brought the engineer elements of the Group on to the site of the devastation.

In the Royal Engineers Journal of September 1951 Brig R Gardiner CEB gives the full details of the reconstruction of the Bombay Docks. The *SS Fort Stikine*, having docked in Victoria Dock on the 13th with a mixed cargo including baled cotton and nearly 1200 tons of explosives, discovered a fire on board at 12.30 the next day caused by spontaneous ignition of the cotton bales. The first explosion occurred two hours later accompanied by a tidal wave in the dock of considerable magnitude, with another half an hour after that. The first caused the destruction of 90% of the entire fire-fighting force, including many fire engines which had been trying to contain the fire. The ship had completely disintegrated. *SS Jalapadma* berthed alongside was lifted clear of a thirty feet high shed and dropped sideways with its bow overhanging the water. *Fort Stikine's* anti-submarine defence gun, complete with its platform weighing in all about 30 tons, was found deposited in the main road outside the docks 500 feet away. In fact the Port Trust of Bombay Authority were later held to blame for not putting out the fire mid-stream or even sinking the ship before it entered harbour, as it was established that it was already on fire before docking. In defence they felt the value of the gold bullion also carried far outweighed other considerations. Many of the gold bars and biscuits were carried up to two miles to land on verandahs of astonished citizens; others were lost at sea and yet others were subsequently discovered in the bottom silt of the dock alongside various types of ammunition when, as there were no mud pumps, gangs of soldiers nicknamed 'mudlarks' probed the ooze by hand. One of the earliest finds was by Lt Ken Dando's Mahratta platoon of 485 Company. The PM platoon was commanded by Lt A Geerarts and the Sikh platoon by Lt Sid (later Maj Gen) Pinto IE.

All the other 12 ships in Victoria Dock had been set alight and explosions in their magazines added to the turmoil, which continued for days. In Princes Dock five more ships were set on fire and severely damaged. All buildings around the two docks were destroyed and their contents set on fire. Outside the dock area incendiaries thrown by the explosions had caused fire to spread to the congested warehouse area and the approach to Victoria Railway Terminus was impassable for two days. Fortunately Alexandra Dock, the most modern of Bombay's docks escaped undamaged and miraculously, despite adjoining Princes Dock, the bulk petrol depot escaped.

The strategic value of the Port of Bombay needs no emphasis and immediate efforts were put in hand to carry out the necessary reconstruction. 99 Company and 329 Company were employed on this task for six months until October 1944, when Victoria Dock was reflooded. Damaged ships, which had lain on the mud, had been patched and refloated; 800,000 tons of debris had been cleared; railway tracks renewed and temporary building structures replaced in the devastated warehouse area. 485 Field Company under Basil Plummer was also involved in this work. Without the rehabilitation of the Bombay docks, operation Zipper to invade Malaya, might have been impossible.

Following this intense activity 99 Company were sent to join 116 Indian Independent Infantry Brigade as their integral field company in the Ranchi area, spending much of their time training the Assault Pioneer Platoons of the three infantry battalions and providing 'special effects' (such as simulating mortar fire) on exercises and demonstrations. They then went to the Andamans (see Chapter 23). Meanwhile the other Bombay Sappers involved, 329 Company moved to the airfield at Barrackpore, then to Alipore near Calcutta and 485 Company prepared to go to Burma under Steve Clark.

Flood Relief

Another aspect of activities in India during the war was flood relief. 92 Field Company, just returned from Ceylon under Maj AC Lewis in September 1943, was stationed near Burdwan. The trunk road and railway had been cut. 481 Field Company was also brought on to the scene under Roger Greet, but they were camped many miles from the flooding. Although the objective of bringing them nearer to the action was understandable, it was at the terrible price of a cholera outbreak. Strong men went down like flies, close to death within 24 hours.

According to the War Diary the flood was caused by the Damodar River, north of Calcutta, bursting its bounds and flowing along an old bed. It was there up to 8 miles wide and between 6-10 feet in depth. Villages, crops and communications were devastated with heavy loss of life. The Grand Trunk Road was breached in four places and the main

El Railway line in seven places. 92 Company worked from the Calcutta end and 481 Company from Burdwan. 9 Bridging Platoon were also involved. It took until 18th October for the work to be completed, although 481 Company, after completing 17 spans (680 feet) of the last bridge requiring replacing, was ordered to move to Burma only two days beforehand. The very warm thanks and congratulations from Eastern Army are recorded.

Coal Mining

One of the most bizarre of these operations was in March 1945. 458 GHQ Troops Engineers having just come out of the Arakan where they had been responsible for the building of a bituminous hessian road from port to the front line, found themselves at Dhanbad in Bihar State. India at that time was desperately short of coal and John Pymont retells how their unit received all sorts of American equipment to excavate coal from a large hole $\frac{1}{2}$ mile long, $\frac{1}{4}$ mile wide and 150 feet deep at Bermo where the Indian railways had mined the softish coal by hand before the war. The coal was then carted to the railhead for despatch to Calcutta and other large areas of activity. The equipment was too large for the requirements and within two months the railways were unable to handle any further supplies and 458 GHQ Troops Engineers were sent to Orchha near Shansi as 458 Forward Airfield Engineers.

Airfield Support

Maj CH Waldron, when a subaltern with 448 Army Troops Company, was at Bilaspur for almost a year from March 1945 constructing Nissen based huts for the local RAF, a 3000 gallon water tank and seemingly acres of PSP airfield laid on murrum. He was instructed to do something about the mosquito menace by using Paris Green. Collecting their two pounds ration from the local Jemadar RIAMC medical officer, it turned out to be a mixture of copper arsenite and acetate, which would have been quite capable of wiping out any villagers in contact with the treated water. The Paris Green was returned and diesel oil used, which could at least be seen on the surface and was less likely to prove lethal.

They continued to have trouble with the PSP bayonet fixings springing apart with the impact of aircraft landing, so that rather than relaying it, they ran a workshop lorry on to the track and welded as many joints as they were able in between aircraft landings, without regard to the future problem of taking it up.

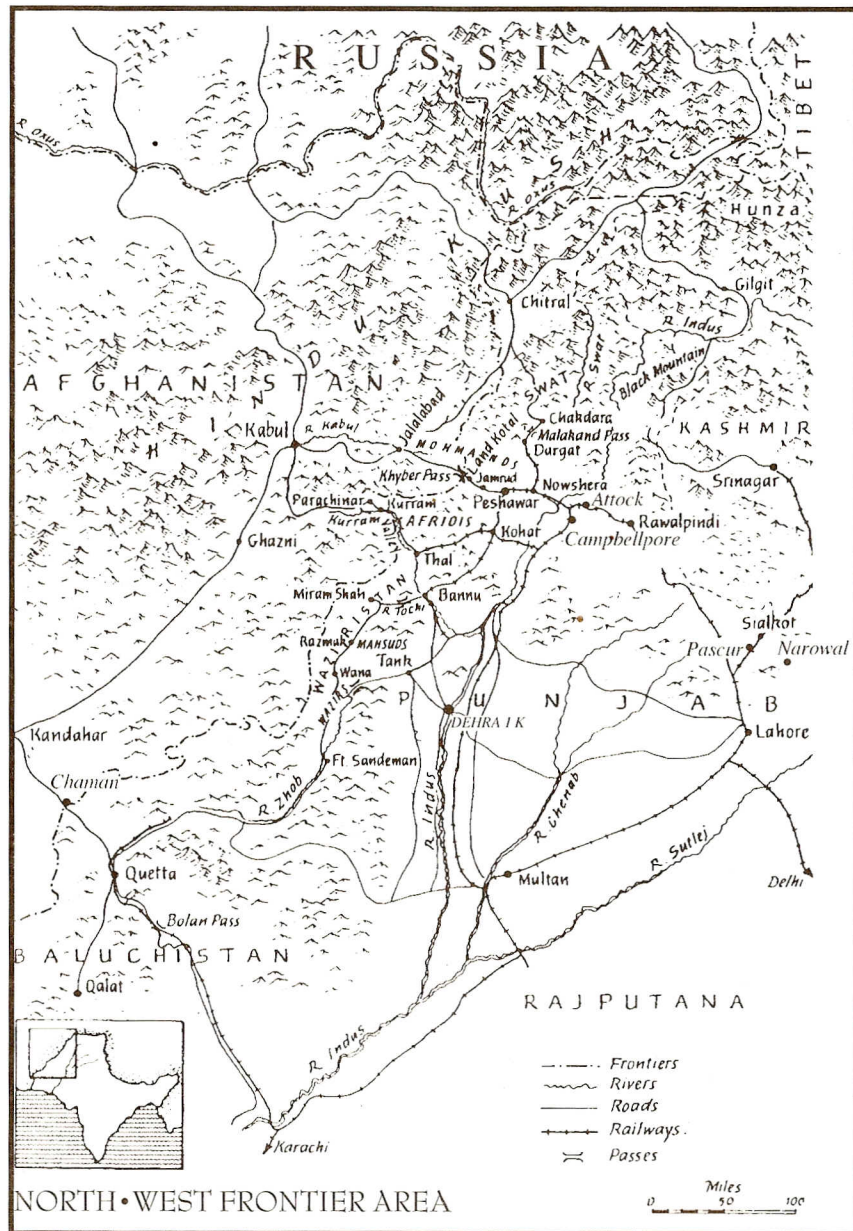
The North-West Frontier

Periods of service at the North-West Frontier had always figured largely with the Bombay Sappers. For example during the 1935 major earthquake in Quetta, which killed some 20,000, 17 and 19 Field Companies had been immediately despatched from Kirkee. So that there would be enough bricks to build huts for the winter, they reduced two-storey barrack buildings to single storey, then adding roofs to the huts. John Cowley (later General Sir John Cowley) received the Albert Medal for rescuing lepers from fallen buildings. This was converted to the George Cross when that decoration was created.

30 Field Company were posted to Quetta as early as April 1942. The Germans were expected to come through Persia to Baluchistan if the Russians were defeated. To anticipate their arrival, reconnaissance was undertaken to discover alternative ways out of Quetta that might be needed if the railway line at the Bolan Pass were destroyed. On one of these trips, David Young describes how important water was – when there was none and drinking from a dirty pond was the alternative to dying of thirst and in contrast during its over-abundance when he was overwhelmed by a three feet high flash flood which marooned his vehicle and eventually carried it 250 yards just after they had evacuated it.

The company then spent three months in the hills of Shelabagh, 60 miles from Quetta, near the Afghan border, helping construct a mountain road for the positioning of 25pdr gun emplacements, which they also built. Water supply tanks were set up along the road and the re-opened railway to Zaidan, as this was part of the aid route through Persia to Russia. Days off gave the opportunity to go down to Chaman inside Afghanistan to watch the camel trains of Persian carpets. At the end of 1942 it was difficult to see how a large carpet might have reached Kirkee, let alone the UK. There then followed a period of intensive bridging training on the Attock River. This was very cold and fast flowing, so that it was difficult to maintain pontoons under control. A visit to the Khyber pass on vehicle convoy driving training provided some of the jawans with their first sight of snow.

After being sent to combined operations training at Juhu beach to the north of Bombay and then to Lake Khadakvasla near Poona (where now there is the Indian Defence Academy for which in Autumn 1949 Pandit Nehru laid the foundation stone and the privilege of representing the Army in the combined guard of honour at the ceremony was given to 49 Construction Company of the Group). Owing to a shortage of landing craft, 30 Company was switched from assault landings to jungle training preparatory to "slogging into Burma the hard way". With just time to dye clothing jungle green they were sent first to Calcutta, then by boat to Chittagong and from there by truck to the Arakan.



Yet another company to serve on the North-West Frontier was 96 Field Company. Lt Brian Stone recalls being posted to them in 1942 while they were at Kohat when the OC was Jasper Porter. They subsequently moved deeper into the frontier zone at Wana. Chargers were assigned to officers and mules for transport 'on column'. These were to show the flag to recalcitrant tribesmen. So as to avoid being obvious the officers' topees were discarded for pagris and the chargers were left behind. Whilst at Wana the hockey pitch needed resurfacing and a mixture of mud and cow dung was used. A visiting brigadier asked the jemadar in charge what materials he was using, which brought the prompt reply "bullshit sahib".

From Wana they moved to Nowshera close to Christmas time. A goose bought for fattening for the feast was stolen one night before fully ready. Patrols were sent out to search the countryside and it was found in the same yard from which it had been purchased. Finally they moved early in 1944 to the very large supply depot at Avadi near Madras, where the company received the thanks of the Base Commander for their good work. They were then posted to the Arakan towards the end of 1944 employed on road construction using large numbers of local labour.

482 Field Company, after formation in Digby in September 1942, moved to the North-West Frontier the next May and remained there until departing for Iraq in September 1945. As with the other companies serving in the area, they had a period at Nowshera for bridging training and then to Peshawar for field training and toughening. Their PM section was ordered in August 1943 to build a suspension bridge over the Kunar River at Kauti in Chitral. The task of moving all the bridging materials and equipment, wire ropes and girders over the 10,000 feet Lowari Pass by mule transport was formidable, particularly on the final section along a precipitous face over the river gorge. Their OC, Leon Lubett, when following them up, was thrown off his bolting horse while crossing the Lowari, collecting a split head and a fractured wrist. The Scouts doctor in Drosh patched him up, but with no X-ray equipment, did not diagnose three cracked vertebrae which were not detected until the following year when he had reached the Arakan.

Expecting to leave for Burma, the company were disappointed that they instead moved to Razmak, which was always a serious commitment with frequent clashes with a determined, skilful and well-armed population of war-loving Wazirs and some Mahsuds, whereas Peshawar had been a quiet location by frontier standards. Razmak was a large brigade fort, guarded by wire entanglements, stone walls and sangers with concrete guard posts and towers spread around the perimeter. In this encampment lived four or more full strength battalions, mountain

batteries of artillery, some armoured cars, the sapper field company and supporting troops. No women were permitted to enter, whether wives, domestic staff or local Pathans. Columns were sent out from time to time, to pacify or perhaps avenge some local outrage. These could be serious affairs with the prospect of quite severe casualties if attention lapsed for a moment.

Lt PH James arrived with the company's advance party and the second morning, one of the gates left open facing the light airstrip adjacent to the perimeter, without thinking, he rode out to exercise one of the horses and cantered around the airstrip much to the astonishment of a detached piquet in a concrete tower protecting the airfield. On returning twenty minutes later the Brigadier summoned him and gave him an almighty dressing down, explaining that he was lucky not to have been shot by a tribesman often hidden from view in a nearby nullah. Had he been shot a full battalion operation would have been required to recover the body.

James was then sent with his platoon on detachment to provide sapper support for the brigade at Wana, a similar station to Razmah, but based in Mahsud territory. In Wana the sapper lines were designed for a full company and the accommodation was of high standard. A strange agreement had been established with the local tribesmen. Once a month officers from the station were permitted to ride out over the plain with the Wana hunt, following a drag line or hunting if a suitable quarry had been located. Provided they were unarmed, but protected by local tribal levies, known as Khassadars, also mounted on their hill ponies, they would not be sniped at or attacked. Only on one occasion did an unsporting group of Mahsuds open fire from a distance. Horses at full gallop being a difficult target, no one was hit. The Khassadars received a temporary cut in their pay and it did not happen again. It was not until Sep 1945 that the company moved to Iraq and later to Palestine.

25 Field Company in October 1944 formed part of the Nowshera Brigade on the frontier, being housed in the Malakand Lines in Nowshera itself, some 30 miles east of Peshawar. Capt WL Sheldon was 2IC with Maj Faruqui, who, after partition became EinC Pakistan Engineers. In November the company took part in a brigade exercise into the foothills north of Nowshera. This was intended, if not to intimidate, which it certainly did not, at least to remind the local tribesmen of the continuing army presence. The exercise was carried out with all the time honoured ritual of a large column engaged in frontier warfare. Infantry occupied the hilltops as the column wound its way through the valleys below. On orders to rejoin the column as the tail of the procession passed, the infantry piquets hurtled down the hillside with amazing speed and agility, Bill Sheldon recalls, as the

gunners prepared to blast any hostile tribesmen who might appear on the crest just vacated. Except that heliograph and lamp had been replaced by wireless, the whole exercise was pure nineteenth century, even to the long strings of baggage of camels as well as mules. The Brigade Major and Adjutants wore distinctive coloured jackets and dashed about on horseback. In view of the alleged marksmanship of the tribesmen, this appeared to be a somewhat dangerous practice, but the only casualty on that occasion was one officer falling off his horse.

By then many tribesmen were serving in the Indian Army and this undoubtedly helped reduce tension on the frontier. Sheldon recalls being out one day exercising the horses with his havildar, who described a minor engagement he had been in before the war in which 'we' had won the day. Only later did it transpire that on that occasion 'we' were the tribesmen. At all times security of arms was strictly adhered to and the jawans slept with their rifles chained to their bodies whennot in a secure military base.

Although parts of the North-West Frontier remained comparatively undisturbed by the turmoil in Northern India before and after partition, there was one incident at the end of 1946 when the Hazaris attacked the village of Oghi near Abbotabad. The situation in Waziristan became very tense and in April 1947 there was widespread rioting and looting in Dera Ismail Khan. All the pipelines, roads and tracks in the area were covered by armed parties of Wazirs and Mahsuds. To aid the Civil Power, mobile columns, including a sapper contingent, recovered explosive devices – on one such occasion a sapper was heard to exclaim "asti, asti, kal pugga din hai" (slow, slow, tomorrow is pay day).

Movement and Reorganisation

The movement of companies around India prior to going to Burma is illustrated by the experiences of 37 Field Squadron. Under Maj R Wood in October 1944 they were at Nira Camp near Ahmadnagar as part of 50 Tank Brigade. They then had to make the long journey to Wabyn north of Maungdaw by rail from Kalyan to Goalundo Ghat, then a river steamer to Chandpur, train again to Chittagong and then once more a steamer to Tumbrughat and finally road to Wabyn - a journey lasting almost 8 days.

In January 1945 25 Field Company was ordered to move by rail to Arakan in the role of LofC troops and had to leave its own vehicles and animals behind in Nowshera. A ten day journey in special trains, changing from broad to narrow gauge and crossing the Brahmaputra by ferry brought the unit to the transit camp at Dohazari some 30 miles

south of Chittagong. The company remained there for three weeks to re-equip with vehicles and essential stores, during which they undertook sapper works to the camp and in Chittagong docks where they drove wooden piles to strengthen a jetty. Their British MT Sergeant managed to acquire a number of chassis from which he constructed six one-ton trailers, so that when they were ordered to Buthidaung, some 150 miles further down the Arakan Road just inside Burma, the company were able to complete the move in one lift. For the next two months the company was recovering Bailey bridges, replacing them with wooden trestles and RSJs, while the Arakan battles advanced to Akyab and beyond.

Similarly 93 Field Company stationed in the summer of 1945 at Coimbatore were ordered to undergo a fortnight's Bailey bridge training in the creek of Cuddalore. This for Lt John Moss had two highlights. Fort St David's on the near island across the creek, was where Clive of India learned his soldiering and where Dupleix, moving down to conquer from Pondicherry, was repulsed. Although in former times the French were the enemy, in 1945 they were allies.

The second highlight was when he was invited to let his platoon lead the Bastille Day parade in Pondicherry and he took his place with the dignitaries on the saluting base. His platoon looked smart and soldier-like in their jungle green and new Sten guns. The French colonial troops in white uniforms, one battalion with red sashes and another with blue, just did not compete. After the parade there was lunch with the Governor of the Indies, the Prefect of Pondicherry and the Archbishop. Being a French occasion it was some lunch.

Re-birth

Several of the companies who had been captured and lost their identity with the complete interment (and much loss of life) at the fall of Singapore, were re-born by renumbering certain companies. 25 Field Company became 19 Field Company, 92 Field Company became 22 Field Park Company, 27 Field Company became 17 Field Company, 28 Field Company became 18 Field Company and 328 Field Park Company became 42 Field Park Company.

27 Company returned from Iraq in 1945, becoming 17 Field Company in September 1946. Before this Maj Leon Lubett recalls his six months with them from November 1945 when they arrived in the old forward hospital at Moreh on the north side of the Lokchau River within Manipur State and opposite the Burmese village of Tamu. Their task was to clear unrecorded minefields as locals and their cattle were blowing themselves up frequently. As every depot at that time were only too

glad to get rid of their stocks and equipment, the company was able to acquire workshop lorries, ambulances and armoured personnel carriers – just ask and forth it came. Seeing that it would be necessary to burn off the jungle and scrub that had grown up, a request for six flame-throwers resulted in the delivery of 36 together with enough fuel to burn off half of Burma. The company installed itself in the old hospital site that was just above the river, fortunately during neither the malaria nor scrub typhus seasons.

With ample rations on the hoof, fish from the mountain pools and a river to bathe in, there was almost a holiday atmosphere with the sections competing in the quantity of mines lifted. Only two minor casualties were suffered and the tour finished with a jeu-de-joe blowing up about 3 tons of assorted ammunition and mines. Lubett handed over to Maj JGF Clarke who was the last to leave following the handover in October 1947. Although Moreh was an isolated site with few facilities, evening sessions of tombola were popular with the other ranks, but the entertainment highlights were the displays by the famous Manipur Dancers. One visitor was the botanist Kingdon Ward who had been engaged by the US forces to lead a team to locate and bring back remains of US air crew from the many downed Dakotas for future reburial in the USA.

Moving back to Peshawar in September 1946 Jo Sneden recalls the first ceremonial event as the renumbered company was at a large review on the airfield to mark farewell to the Peshawar Divisional Commander Maj Gen Bruce Scott.

At that time moves were in hand to bring about an all PM company. The Sikhs were the first to leave, joining 401 Field Squadron at nearby Risalpur. Departing officers to the UK had eventful journeys by train on their way to Bombay. One such train was attacked and looted near Amritsar. Reaching Delhi a day late, the luggage van was empty save for one corpse. The officers arrived in Bombay with only their bedding and the clothes they were wearing.

In early January 1947 when 28 Company revived the pre-war numbering of 18 Field Company, it was announced the company later in the year would become all Sikh. In February the company moved to Alipore camp, which was only about half a mile from the centre of Calcutta. Their duties included providing patrols to search hotels and shops for weapons. On one occasion Col SR (Steve) Clark, who was the OC at that time, recalls being with the 25th Dragoon Guards who were equipped with Sherman tanks with CD searchlights fitted atop. Some thousands of Sikh taxi drivers were driving ten abreast up Chowringhee, waving swords and screaming. The tanks moved out of

the side streets, formed up across the road and switched on the searchlights. The Sikh drivers, blinded, took fright at the sight of the tanks and fled ignominiously.

Post War Kirkee and Dighi

Colonel LO Clark said after he had arrived as Commandant in July 1945 "there were very few regular British Officers at Kirkee below the rank of lieutenant-colonel. Most were short service majors, often promoted NCO's, the remainder young captains and lieutenants holding Emergency Commissions, but they were all almost uniformly good". There were then two officers' messes – one in the original mess at Kirkee and the other for the training battalions in Dighi. Both were run on pre-war lines except that officers usually wore service dress instead of mess kit for dinner. The Indian officers conformed to the European style of feeding.

The work of HQ following the cessation of hostilities was mainly the disbanding of war-time field companies, the refitting of regular companies and the demobilisation of men, including some thousands of ex-prisoners-of-war of the Japanese. Brig Clark says he will never forget the arrival of the first batch of released prisoners. They were desperately thin and weak, though quite cheerful. Every man throughout three years of captivity in nothing but canvas shorts had managed to retain his Royal Blue lanyard and displayed it proudly over his right shoulder.

Lt Col Hugh Berry recalls being invited to be temporary Band Officer to take the Group band, which was composed entirely of Sikhs and he had been serving with Sikhs for three years, to Delhi for the Victory Parade. They were there for two weeks with all the other Indian Army bands. His bandmaster was very experienced and looked after the technical performance, while he and his Jemadar ran the military side. This entailed ensuring a high standard of parades, band practices and rehearsals, but perhaps more importantly with Sikhs, having a full off-parade programme of games and visits to keep them out of mischief and away from the flesh-pots of Old Delhi. The pipe and brass band under Bandmaster T Smith was on constant duty, either playing at the Poona Railway Station to welcome units for demobilisation or playing to beat Ceremonial Retreat or even playing on official dinner nights, such as for the retirement of the CRE Sir Ronald Charles. They also played in the mess gardens on many Sunday mornings. Following partition the Brass Band remained with the Group and the Pipe Band, together with its instruments, was despatched to Sialkot.

Depot Battalion at the end of 1945 was under the command of Lt Col P Eason. Promotion to captain as OC S3 Company and Education Officer at the

Depot involved Dennis Browning in running a school to improve the literacy of the jawans before their demobilisation. At the same time Capt HG Brayne was in charge of teaching village crafts such as cloth-weaving, rug-making and field husbandry in the unit farm growing cotton, sugar cane etc.

Return to Dighi

For companies coming back* to India after active service, life was inevitably humdrum. As Harry Buckley, OC of 21 Field Company recalls, during their period at Dighi from Spring 1946 to June 1947, after a busy North Africa and Italy war, "this was a peace-time period with no great events where we happened to be. The war-time diary jumps from one high point to the next and disregards the day to day little happenings. A peace-time diary illustrates that there are no peaks and hollows, so that lesser events come to matter." On return via Greece the company was installed at Dighi, the men being sent on leave in batches and, as they were posted to Depot on their return, numbers in 21 Company were made up by new intakes. The officers were housed in the main Dighi Officers Mess complex until they became due for repatriation. Eventually this left the 2IC Capt P Minett the sole officer remaining. Just before he too left Harry Buckley took over the company, but with a very experienced team of VCOs and NCOs who had been with the company for a considerable time. These included Jem Pandurang Deshmukh who later became Group Subedar Major. They were soon joined by Jem Labh Singh, who became a Lieutenant Colonel.

An early problem in this period was a driver who had been caught selling petrol to a taxi driver. To Maj Buckley's horror the taxi driver had also been arrested and was languishing in the guardroom. Although he was quickly released he still had the nerve to claim damages in the Civil Court. Presumably the practice of selling petrol was a habit imported from the company's time in Greece. In August 1946 the company were given the task of building a floating Bailey bridge over the Muta Mula at Dighi in preparation for Field Marshal Auchinleck's official visit. The demonstration was to remove a bombed section with a replacement section in double quick time. As it was during the monsoon the steeply sloping far bank was highly slippery and the bridge dragged the whole company on ropes and tackle plus a bulldozer down the slope. Luckily the gods were with them and the fulcrum jaws landed spot on the pins on the first float. Prior to the demonstration the MBE was presented to Jem Deshmukh and the MC to Jem Mohd Riaz before the formed up company. On the muddy parade ground the company were six inches taller, marching on clods of earth.

*Footnote: Ed - returning with 26 Company for disbanding, I had to take my turn as duty Mess Officer. One morning at chota hazri I was asked by one of the officers returning from Burma if I would open the bar for him so that he could have a whisky, which he said he needed for him to start the day. In my youthful stupidity I refused consent, not realising the huge psychological problems so many of the returning fighting units were experiencing, whilst I had spent the war with no other traumas than teaching others how to live in the jungle.

In November 1946, after moving to a former hospital in Dunkirk Lines, the company was despatched for a short time to the Mahabaleshwar area to drive bandits towards a stop formed by other troops away from villages they had been raiding. Returning to Dighi, in order to smarten up the guardroom, Maj Buckley had a plinth built in the front, plastered and painted a light blue with the company identity printed in white. Over was mounted a large Bombay crown in brass. Workshops cast this from a truckload of 25pdr shell cases acquired from the local military disposal compound. This was polished daily, proudly glistening in the sun and obviously when Bhagat became Commandant, he was so impressed that he had crowns cast for all Bombay units.

Eventually the time came for the PM's to leave. 21 Company was to become all Sikh, so there was an exchange with 22 Company. Some of the men had been in the company for many years and had friends across the caste and religious barriers. The unit had to shake down again with training and education, so that it was difficult to keep motivation going. Kabaddi was introduced as a means of letting off steam, the right kind of soil imported and a court made. Due to being near to Kirkee Buckley and Sub Mangal Singh managed to collect together one or two good sportsmen, so that this was very successful, save it needed curbing to reduce hospital attendance to a reasonable level. 49 Army Troops Company was their main opponent. Married quarters were built so that a small percentage of families could live with their men.

One of the company's roles in an emergency was to keep Bombay water supply and sewerage systems going in the spring of 1947 in case of serious riots, but luckily this never arose. Maj Buckley handed over to the company's last British commander, Capt Peter Wakley, who a month later in August, handed over to its first Sikh OC.

Independence

The RIE officers of the Centre held at an At Home party for all the RE officers of the Centre and the neighbouring units in celebration of Independence Day on 15 August 1947. A toast for both the new countries was proposed by Maj MM Nath RIE at exactly midnight on 14/15 August, the dawn of the new era.

Independence having been declared the process of dividing the Army was started. The Bombay Sappers transferred all its PMs, who were to go to the Royal Pakistan Engineer Centre at Sialkot to form a new grouping. PMs had been in the Corps from about 1880. A guest night was held in the Officers' Mess, with the band etc, attended by all the officers and VCOs in Kirkee to bid farewell to all those leaving for Pakistan. This was an emotional occasion for everyone. The last train load for Pakistan left Kirkee on 31 October 1947 so ending over 60 years of service.

The Pakistan Independence Day ceremonial took place in Karachi on 14 August, the day before that for India. Lt (later Brig) DA Barker-Wyatt who had been with 411 Parachute Field Company (411 Parachute Squadron had become 411 Parachute Field Company in March 1945), remembers they were responsible for the saluting dais and flag-pole for the first official flying of the Pakistan national flag. He checked the arrangements, but was unsure of the type of hitch required to ensure it was rigged so that the President to be, Jinnah, could unfurl it by a single dramatic tug. Fortunately the CRE Lt Col (later Brig Sir Mark) MCA Henniker DSO MC appeared at the right moment to advise the sapper who was to hand the release cord to the President.

On the day the company lined part of the route along which the Viceroy and Mr Jinnah were to be driven on the way to the Parliament buildings. The orders given to the acting OC Capt HP Munro had been vague "follow the unit preceding you lining the route as to when to Present Arms". This the company did as the Viceroy and the President drove past in a Rolls Royce followed by one or two other cars. The preceding unit, having ordered arms, was reforming to march off, when suddenly another larger cavalcade appeared. Pat Munro properly saluted, but the company, reforming ranks too, were unable to present arms. Apparently as the whole route had not been lined, a buffalo had managed to wander across the road, dividing the procession into two very separate parts, like the Indian sub-continent itself.

Although 44 Field Company was spared the horrors of the partition of the Punjab four Bombay Sappers who had been in the company were involved. Lt WT (Bill) Image was killed in Amritsar serving with 33 (Bengal) Parachute Field Company along with Capt N Powell, the 2IC of the company two or three days after Partition Day. The CRE immediately visited the company, taking with him Spike Barker-Wyatt as a replacement for them. The OC, Maj PH James, was also a former Bombay Sapper, having served with 482 Field Company on the Frontier in 1944. 33 Company, which was Muslim, moved from Amritsar to Sialkot, to join 42 (RB) Field Park Company, also all Muslim. Maj Sam Mahmoud, the OC of 411 Company had been married in Lahore just before Partition Day. He joined the CRE in organising the building of refugee camps in the Lahore area at the end of August.

The company's last task in the Karachi area was to build a refugee camp there. The only substantial structures were concrete slabs for cooking, as it was thought that the refugees would only stay for a few weeks before being properly rehoused. When Pat Munro visited Karachi in 1954 the camp was still inhabited. In September the company bade farewell to their Muslim platoon who were to join 33 Company in Sialkot later in the year. The rest of 411, who were all Mahrattas, entrained

for Kirkee under 2Lt Laloo, the only remaining officer in the company. Subsequently in 1948 33 and 411 Companies found themselves opposite each other on the Kashmir confrontation line, but the old ties were too strong to prevent them arranging a temporary truce for a reunion party on neutral ground.

At Kirkee the communal hatred in the Punjab was of great concern to the Sikh contingents, as most belonged and still had their families on the other side of the proposed border from India. Many had lost their property and in some instances relatives had lost their lives. The Government were very helpful and set up refugee camps in important towns in East Punjab. A refugee search party was sent from Kirkee to tour these camps, so that information could be sent back to the Group. In addition 99 Field Company established a refugee camp at Dighi where families of serving Sikhs could be accommodated. Each of the eighty or so families had its own Wana hut and a kitchenette. There was also a children's playground and a Gurdwara, recreation room and school. This was considered at the time to be one of the finest refugee camps in India. 99 Company's last peacetime task before joining JAK Force on the Jammu and Kashmir border was to immobilize a wide variety of AFVs from 1930 tanks to the latest bridge-laying Shermans. Initially explosives proved too slow, so in the end the vehicles were pushed into an enormous pit to lay in a tangled mess.

Partition

Under the terms of the partition a referendum had to be carried out in the North-West Frontier Province to determine whether it should join India or Pakistan. Major deployments were needed to cover the visits of the Viceroy and other leading politicians. By August 1947 millions were on the move and 17 Field Company provided escorts in trains between Peshawar and Rawalpindi. Even so time was found for civil projects including work at Peshawar and Malakand power stations and on rural tracks and crossings. A longer track was also constructed in the area of Pandar Lalma, east of the Chiba.

There were many disturbances in the Punjab in 1947. Those in and around Sialkot in the West Punjab involved a number of sapper units including 42 Field Park Company (328 Field Park Company were so renumbered in early 1946 after their return from Burma). Sialkot Sub-area extends for about 130 miles along the borders between Pakistan and the Indian state of Jammu and Kashmir. Troubles started in February 1947 when two companies of the Frontier Force Regimental Centre were deployed along the NW Railway line. At this time 622 Group RIE was forming at Sialkot, eventually consisting of 42 Company under Maj ADM Dunne, together with 14 and 15 Field Companies. 42 Company was required to take over the guarding of vital points, the

other companies to find mobile columns. All three companies carried out intensive patrolling to restore confidence in the countryside. 14 and 15 Companies were Madrassis and 42 Company were PMs. At the beginning of August trouble broke out in Lahore and Amritsar and Muslim refugees started to arrive in Sialkot, where as a result the relatively quiet situation began to deteriorate. On 13 August Sialkot City was ablaze and to restore order, murderers and looters had to be shot and a curfew was imposed. The next day 15 Company left for Narowal, where they were faced with utter chaos, with Muslims burning Hindu mohallas and Sikhs from across the border raiding Muslim villages. So 14 Company were sent to reinforce them and Maj Walker was placed in charge of the force. Meanwhile the monsoon was gathering force and all the roads became impassable. There remained the railway to Sialkot and with the threat that 42 Company would take over, the civilian personnel were persuaded to carry on.

The Boundary Commission made their very belated decision on 17 August. As a result the civil district of Gurdaspur, in which the Pakistan flag had been hoisted with rejoicings, was handed over to India. Sialkot immediately became a frontier district and a steady stream of Muslims started to cross the Ravi into Pakistan. The monsoon strengthened and all dry weather tracks became unusable. For some time the balance between the Sikh and Muslim peasants was even. Within reach of metalled roads the Army was able to maintain some order, but beyond there was no faithful record of the slaughter. To add to the difficulties parties of troops came across the border from India to evacuate their families. Hindu and Sikh refugees were pouring into the Cantonment from Sialkot City, so three refugee camps were started and run by the military. The numbers rose to 15,000, with No 2 camp converted to Muslim which was run by the civil authority, all the others being run by the military with No 4 camp, which had been opened at Narowal, placed under the command of Maj Walker with a company of field ambulance and a field hygiene section.

Although holding their own in the villages, the Sikhs were anxious for military protection. As this could not be provided a mass evacuation started. The first sign was a column of 4000 from Narowal and Shakargarh, with animals, who had burnt their villages and marched to the Ravi Bridge. By superhuman efforts the sappers under Maj Walker kept this column separate from the incoming Muslim refugees so there was no clash and no casualties. The tap was open and refugees poured from every direction. 33 Parachute Field Company, who had been sent from Amritsar, was dispatched to Pasrur to cope with the situation there and 42 Company was given the task of establishing a further camp. Escorts were provided by the various units as far as possible and refugees packed on to trains with 5000 on one as the record.

The only serious casualties incurred in an attack on a passenger train was when an over enterprising NCO had sent 300 refugees with a guard of only three men. Evacuation by train was the only effective solution and a train shuttled steadily between Wazirabad and the Ravi Bridge for a month and other routes were organized. Attacks on the trains had to be beaten off and foot convoys protected.

By the end of September Maj Walker had developed dysentery and the other sapper units were withdrawn to Sialkot after six weeks of ceaseless toil under the most discouraging conditions imaginable, leaving 42 Company to take on the repair of the dry weather track from Pasrur to the Ravi River. It was not until 4th November 1947 that all the sappers were passed back to the command of the CRE. Except for one company of Infantry they were the only active units in the hands of the Commander; they alone had transport and communications, which were vital factors. Even more was their immaculate discipline, for although they were class units, they remained internally undisturbed in the general transfer between India and Pakistan. This despite the men in the PM units, as was 42 Company, being very worried, many of them not having heard of the fate of their families in East Punjab. Despite this, the fairness, impartiality and smartness of all the men resulted in the Indian Army retaining its prestige throughout.

Transfer to Pakistan

During the partitioning of assets there were never any squabbles as the duplicators, almirahs, amenity stores and right down to the paper clips needed to be divided. A very beautiful shield was presented by Subedar Major and Hon Capt Shah Jahan Khan on behalf of the departing Pakistan ranks to those who were to remain. A silver cup was presented by Sub Maj Jodh Singh on behalf of all at the Centre to their comrades leaving for Pakistan.

98 Field Company returned to Kirkee from Indonesia in December 1946 under threat of being disbanded, as were the majority of companies at that time. The news that instead they were to transfer to Pakistan was met with mixed feelings for, of course, the Mahrattas and Sikhs had to leave. The Mahrattas went to 99 Field Company returning from Italy in July 1947 to become an all Mahratta company and their PM's went to 98 Company. The Sikhs went into Depot Company for reposting. So 99 Company did not disband as feared and is still in existence as this history is being written. The previous OC Maj PB Button had handed over to Capt SC Gautam, who was promoted major. By April the two platoons had left for 21 Field Company and the remaining PM's worked on roads, ditching and earth moving and then they constructed the South West Pacific Hangar on ground south of the

Group workshops to house mechanical equipment. Lt CA (Colin) Paterson, who had by then rejoined the company after LIAP, points out that this was still standing and in use at the anniversary celebrations in February 1995. By June Capt JA (Johnny) Coombs had taken over as OC and was similarly appointed major. Although work was still needed to complete the hangar, the next month they were posted to Muthra to join 80 Independent Brigade Group on internal defence to discourage communal rioting. Most of the units were in tented accommodation and had to rely on wells for water supply and their improvement was the major task of the company. The flooding of the River Jumna in October caused much distress and assistance in evacuation of people and their possessions was the last major task of the company before departing to Pakistan later in the year.

May 1947 saw the departure of the PM and Mahratta platoons from the renumbered 18 Field Company. A farewell parade was held to mark the company becoming an all Sikh unit, the Brigade Commander took the salute and spoke in Urdu to the assembled company and the platoons marched off to join their new single class companies in Northern India, where they too served on either side of the border, facing each other in Kashmir in opposition front lines.

This left the company to keep the peace in the referendum on the partition in the Sylkhet area in the foothills of the Naga hills, bounded by the River Brahmaputra. Shillong was at the top of the hills, with Cherapungi close by, which is known for having the heaviest rainfall in Asia. So even in the driest months the area was very wet and during the monsoon, the rivers flooded so that only the villages were above water and all the water-courses feeding the Brahmaputra were torrents. The only movement possible was by boat. In the run up to the referendum the Company tried to show a military presence and dissuade the Hindus from killing the Muslims and vice versa. This was done by building rafts of local boats, powering them with outboard motors and patrolling the villages irregularly and without warning. Fortunately the referendum came and went without major disturbances and the company returned to Calcutta, where the only task worthy of recounting was the removal of a statue of Bishop Heber from the grounds of the cathedral. This occupied such a prominent position that the current Bishop of Calcutta felt that the congregation were worshipping the statue rather than a worthier recipient. Dan Raschen was given the task of lifting the statue and skidding it on greased timbers to its present position beside the North wall. Beside the statue a memorial tablet to a Capt Sinclair stated he had been brutally murdered by his 'wicked and deceitful' Sikhs about a century earlier. Fortunately the Sikhs carrying out the work did not seem to read or take any notice of the inscription.

After various repatriations and postings, the last British officers left the company in September 1947 and a Sikh Major took over command.

Finale

In January 1946 more than 2000 out of a war strength of 24,470 had passed through the Demobilisation Centre to return to civil life. They were mostly the pensioners and recruits, but normal releases had also begun. No more recruits were being enrolled although some were still under instruction in the single Training Battalion that remained. British officers and other ranks were arriving and departing at a bewildering rate and a Transit Camp had been formed for RE officers coming from England. Lt Col Young remembers passing through Kirkee with 99 Field Company on their way to Iraq that the former Cadet's Mess of the Kirkee EOTS was used as the Transit Officers' Mess.

According to the Group Newsletter of April 1947 a monthly rate of 750 releases had been reached, but even so the Demobilisation Centre could have coped with double that number. The relatively low rate was because the men were not returning for release. All those who wanted it had been released, those that remained wished to continue to serve. Whereas Bengal and Madras Groups could not at that time reach their peace time establishment because of inadequate jawans wanting to stay, the Bombay Group had no such difficulty. However there were still approximately 2500 regular army volunteers to be released not yet arrived at the Centre because so many of the war-time companies were still serving overseas.

The formal Peace Establishment was to be adopted on 1 May 1947; the officers' mess was handed over to the RIE officers of the Group and it is understood that the Mess is still owned by the Bombay Sapper Officers – the only one remaining in the Indian Army so privately owned.

As there was no authorisation for horses in the new establishment, all went to the Central Remount Depot in Secunderabad. This was a cause of great sorrow for many officers who, arriving as young subalterns at Kirkee, had fond memories of the Officers' Riding Course. [See Appendix]

Between 15 August 1945 and 16 June 1947 releases totalled 219 VCOs, 15,571 other ranks and 729 NCs (E). The Demobilisation Battalion had ceased to exist as such by 31 March 1947 and the Centre consisted of one Demobilisation Company, which dealt with arrivals, the holding and dispersal of releasees and a documentation section.

Consequent on the declaration of independence a scheme for volunteer British Officers for a service period of twelve months was put into operation and about twenty officers signed, although none at Kirkee. Don Jones, who was SORE 111 A (ii) in Group HQ at the time, reports that the terms and conditions kept changing, so with others he withdrew his application and consequently the Group was short of Indian Officers. All British Officers were finally proposed to be out of India by June 1948 and the Group was to be nationalised with all Indian officers. This was no easy task at a time when there were only 15 Indian commissioned officers at the Engineer Centre and a further 20 scattered around the various field units. The peace-time establishment for each Field Company was fixed as four officers with a total of 53 officers at the Group Centre. A scheme was introduced to grant suitable VCO's under 40 and with adequate educational qualification Direct Regular Commission in the arm in which they were serving. It was anticipated that the Group would obtain enough officers from this source.

The Training Wing moved from Dighi back to Kirkee at this time so that after all those years, Kirkee reverted to a compact unit instead of being spread over miles of country. As stated at the beginning of this chapter, after reaching a total strength of 25,000 in the Group, now 16,519 had been discharged. The wheel had turned full circle.



River Mula at Dighi

GROUP HQ COMMANDANTS OF THE PERIOD

1936 – 1940	Colonel HB Hamilton
1940 – Aug 1942	Colonel HE Horsfield CBE MC
Sep 1942 – July 1945	Colonel HP Cavendish DSO OBE
July 1945 – July 1947	Colonel LO Clark OBE
July 1947 – 7 Feb 1948	Colonel MRHZ Swinhoe OBE

Brig Gen G.H. Boileau DSO was the Regimental Honorary Colonel of the Group until this was changed to Regimental Honorary Colonel-Commandant in February 1946 and is not to be confused with the executive commandants.

In 1941 The Royal Bombay Sappers and Miners Corps became the Royal Bombay Sappers and Miners Group, Indian Engineers.

In March 1946 the name "Sappers & Miners" became "Regiment" and the Corps HQ became the Royal Bombay Regimental Centre RIE. Although the Group HQ continued to be known as Regimental Centre until April 1947 (when it was renamed Engineer Centre) in September 1946 it was decided to revert to the original name of "Group" instead of "Regiment".

The group became Royal Bombay Group RIE on His Majesty conferring the honoured title "Royal" on the Indian Engineers as a whole, probably the first Indian regimental unit with 'Royal' twice in its title.

UNITS IN EXISTENCE SEPTEMBER 1939

Corps HQ	17 Field Company
Training Battalion	18 Field Company
A Company	19 Field Company
B	20 Field Company
C	21 Field Company
D	22 Field Company
	42 Divisional Headquarters Company
	55 Printing Section
HQ 2 Indian Division Engrs, Kirkee and HQ 2 Indian Division Engrs, Quetta	

ESTABLISHMENT

British Officers	46
British Warrant Officers	12
British NCO's	30
Subedar Majors	3
Subedars	18
Jemadars	37
Jemadar Clerks	5
Corps Havildar Major	1
Company Havildar Majors	11
Havildars	98
Havildar Clerks	14
Naiks	171
Naik Clerks	18
Lance Naiks and Sappers	1983
Clerks	40
Recruits	578
A total of	3006

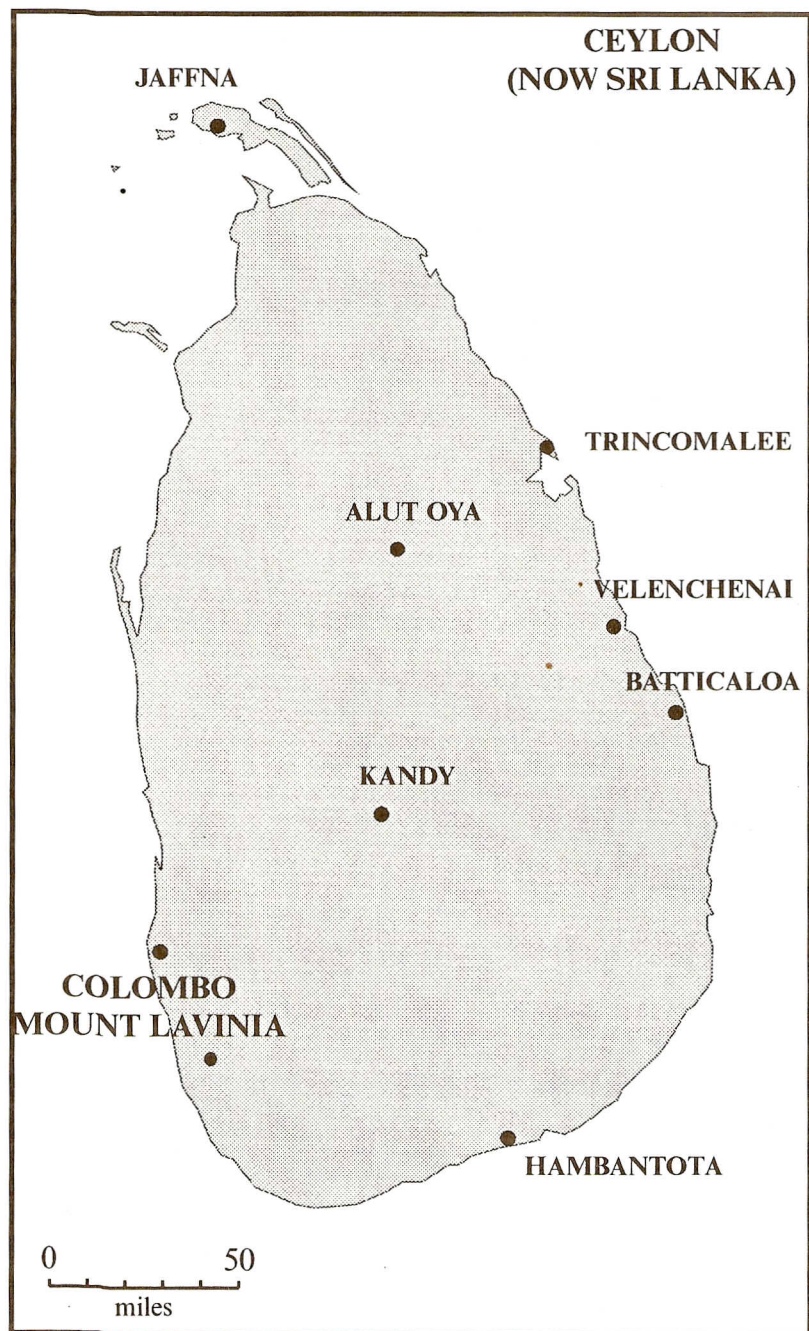
APPENDIX

THE OFFICERS' RIDING COURSE AT KIRKEE
Some recollections by Lt Col DL Jones

Arriving in Kirkee in mid 1945 as a very junior 2Lt from the UK, it seemed to get a posting to a field unit, I would have to do the Officers' Riding Course first. Squadron Sgt Maj Robinson of the 3rd Dragoon Guards (The Carabiniers) had arrived when his regiment had converted to armoured. An irascible little man, his bark was much worse than his bite. Having seen pictures back home of mules struggling through the Burmese jungle, there seemed nothing odd in an officer having to be able to ride a pony as his personal transport and most of us welcomed the opportunity to learn to ride. Kirkee had about a dozen officers' chargers on establishment including Col Cavendish's famous grey, all with mouths like iron from the efforts of countless tyro riders to control them and with wills of their own. They all recognised the Sgt Maj's shouted orders, acting on them long before their riders had worked out what they had to do. All afraid of the Sgt Maj – I did not understand why as no one ever saw him ill-treat any horse – they were liable to bolt if he approached too closely.

We all had to be properly kitted out with boots, breeches and Bombay bowler, worn with the RE pagri-flash on one side and the Royal Bombay crown on the front. Instruction was every weekday morning from 6.30 to 7.30, with lectures on horse management on Saturdays. These included descriptions of equine ailments such as colic, glanders, farcy buds and the sinister sounding epizootic lymphangitis; how to make up potions from arcane recipes and blow a ball (the equine equivalent of a pill) down a sick horse's gullet. Also taught was how to shoot a horse, which, sorry to say, I later found necessary. In the early stages the first ten minutes were taken up what could only be described as PT on horseback, aimed at developing muscles hitherto unknown, but which were essential for good riding. One exercise consisted of vaulting out of the saddle on the command "change", rushing up to the horse in front and vaulting into its empty saddle without using stirrups, continuing until reaching one's own mount. The tallest riders on the biggest horses were placed at the front, so as a shorter person it meant that each successive horse to be mounted, was larger than the previous, so the exercise was completed in a state of near collapse. When it was considered we had improved sufficiently to go outside the HQ confines, we were taken on the golf course where, on arrival the horses repaid this trust by bolting. The only other time this happened to me was during the introduction to the jumps. Down one side of the paddock was a fenced-off section containing a series of low jumps. We had to quit the stirrups and grasp the pommel arch of the saddle as the Sgt Maj led each horse in turn to the grid. He would then slap its rump and the horse would take his rider over the jumps. As Mr Robinson approached, my mount took fright and bolted, dislodging me from the saddle, ending up on the withers. In determination not to be thrown, I leant forward and put my arms around the horse's neck to his puzzlement for he stopped at the end of the grid. Instead of an expected almighty rocket the Sgt Maj was doubled-up with laughter and invited me to dismount and remount, which I did by sliding down the horse's wither and remounting with stirrups.

The first order always received was "Prepare to mount" followed by "Mount". These were familiar to those commissioned from 140 OCTU at Newark, where bicycle drill was one of the first lessons, with identical orders, but not as at the end of the lesson at Kirkee where "Dismount" and "Make much of your horses" was one of the most delightful in the repertoire of orders. The mounts were then given a handful of gur (unrefined brown sugar) which had been obtained for us. We then staggered back to our quarters for a quick bath before breakfast.



CHAPTER TWO CEYLON

HQ CORPS TROOPS ENGINEERS (CEYLON) 92 (RB) INDIAN FIELD COMPANY

Compiled by Major DC Money

In 1942 Ceylon (now Sri Lanka) was under direct threat from the Japanese. A skeleton administrative group to form the nucleus of HQ Corps Troops Engineers (Ceylon)(HQ CTE(C)) was assembled at Kirkee, with the following RBS&M officers:-

Adjutant	2Lt (A/Capt) CWR Story
Field Engineer I (FE I)	2Lt (A/Capt) KG Macnair
Field Engineer II (FE II)	2Lt J Prestige
ditto	2Lt HE Buckley

The group left Kirkee on 6th April and arrived in Colombo the day after a Japanese air-raid had cratered the local Ratmalana airfield. They found that the resources of HQ CTE(C) under Lt Col J Murray (a Bengal Sapper) were extremely sketchy. Requisitioned transport in the form of two old Welseleys and an ancient solid-tyred beer lorry had to be relied on, but a month later two 5-ton Karrier lorries and a 30 cwt truck arrived, accompanied by 2Lt Jackson (the FE III) and Sgt Lomax, the MT Sergeant.

HQ CTE(C)'s main task was co-ordinating engineer contributions to improving the defence of Colombo against possible overland attack, with a mixed assortment of units under command or in support. These included 58 East African Field Company (Maj J Tutton), 67 (Bengal) Indian Field Company (Maj WA Shaw), an Indian Engineer Battalion, an Engineer Stores Depot of Ceylon Garrison, Auxiliary Units of the Ceylon Planters Rifles, and (briefly) 427 Field Company RE.

These units effected repairs and extensions to Ratmalana airfield and aimed at providing Colombo with a defence perimeter in an arc from Mount Lavinia in the south to the river north of the city. Pillboxes were constructed, with areas of panjis in long grass and pits of de-stabilised earth. 67 Company built several bridges over streams in the Hanwella district to provide access to the defence line. The shoreline itself was wired as far south as Mount Lavinia - though the wire was frequently breached by local fishermen.

Meanwhile 92 Field Company moved from Kirkee to Ceylon to join 32 Infantry Brigade. They were part of 20 Indian Divisional Engineers which

had recently formed near Bangalore and then had its HQ south of Colombo. At this stage the Company's officers consisted of the following:-

OC	Maj AC Lewis
2IC	Capt D Anderson
Subalterns	Lts FG Bryant; SR Holt; Jacomb-Hood

92 Company was involved mainly in providing defences south of Colombo and about the south-east corner of Ceylon, work on which had been started by a company of Royal Australian Engineers of 6 Australian Infantry Division on its way from Crete to augment Australia's own defences. The company prepared road and rail bridges for demolition. Its PM section also established a floating bridge across a river, some ten miles inland, to provide an alternative route to and from the coast.

By August 1942, as the threat of invasion had receded, uncompleted work was abandoned and jungle training became a priority. About this time Capt Anderson and Lts Bryant, Pearson and Jacomb-Hood left 92 Company to return to Kirkee and were replaced by Lts Horn, Riddell and Sanderson, Capt SR Holt becoming 2IC. In mid-1943 the company returned to India.

Meanwhile, with direct invasion unlikely, HQ CTE(C) had moved to Kandy, to assume the role of commanding the Engineers of 34 Ind Div, which had four brigades including an East African one. By this time the MT of the HQ had been considerably boosted by the acquisition of motor-cycles, two 15cwt trucks, two Chevrolets (a car and a station-wagon) and a Humber Hawk - for it now had the whole island (except the Colombo area) as its parish. It proceeded to assess the state of bridges and culverts for military traffic, with Lt Buckley working north of a line from Colombo to Valenchenai and Lt Jackson to the south. At the same time, 67 Field Company, 427 Field Company and Ceylon Auxiliary Pioneers built an all-weather road from Hambantota to Alut-Oya, constructing three bridges from local timber. Meanwhile, units of the Engineer Battalion under Maj Ewan were engaged in excavating a hillside at Trincomalee for an underground headquarters.

It has already been mentioned that jungle training then became the priority. Maj Buckley comments "as far as I was concerned it was learning to live in the jungle, to know how to deal with nasties such as leeches and ticks and how to avoid them, to get used to jungle night noises and to be able to distinguish between human and animal ones, to be able to find water, to keep mobile in mud and water in the wet season, to watch your men's health and ensure they took their anti-malaria pills, to watch for footrot and ringworm etc and to learn how to build tracks and small airfields". There were also several Brigade and Divisional exercises lasting a week at a time in the jungle, in conditions and using procedures unfamiliar to most of the units. These were usually to

test communications and to practise moving a company or battalion from one point to another in the dark to take up a defensive position.

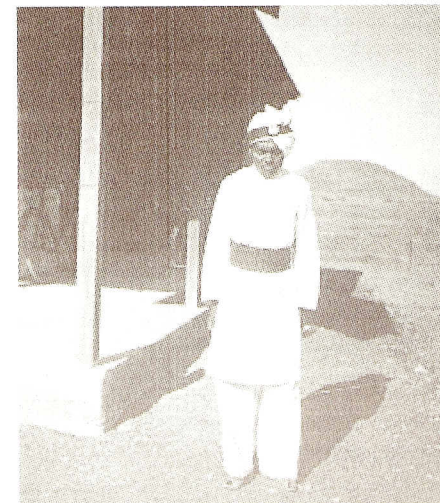
Descriptions of driving in Ceylon single out the prowess of the CRE's proficient Sikh driver who "at 60 to 70 mph would take a gap with inches to spare..... so that the CRE would arrive back in a flaming temper!". Early in 1943 the CRE, Lt Col J Murray was invalided to England and Maj J Tutton from 58 East African Field Company temporarily assumed command.

In late May 1943 the small "ad hoc" HQ group of RBS&M officers with about fifteen Sikh jawans returned to Dighi. The MT was left in Ceylon - except for a BSA 500 M20 motor-cycle which Buckley wrapped up in an old tent and smuggled out to India. As the HQ had no transport when it reached Dighi, this machine proved invaluable. After about six weeks Macnair and Jackson and about half the jawans were posted and at the beginning of July the HQ was moved to Ranchi. Shortly afterwards both Buckley and Story were admitted to hospital. On 18th September 1943 the HQ became HQ 15 Corps Troops Engineers and Lt Col Conner was appointed CRE. 403 and 483 Field Companies (both RBS&M units) came under command of the new HQ.

COMPILER'S NOTE ON SOURCES

This account of the activities of HQ Corps Troops Engineers (Ceylon) and of 92 (RB) Field Company is based entirely on the personal recollections of the following officers:-

Maj HE Buckley, Maj AN Fradgley MBE, Maj RCH Greet,
Capt SR Holt, Brig AC Lewis OBE, Lt Col CWR Story.



Bearer at Kirkee

CHAPTER THREE

THE MALDIVES - ADDU ATOLL

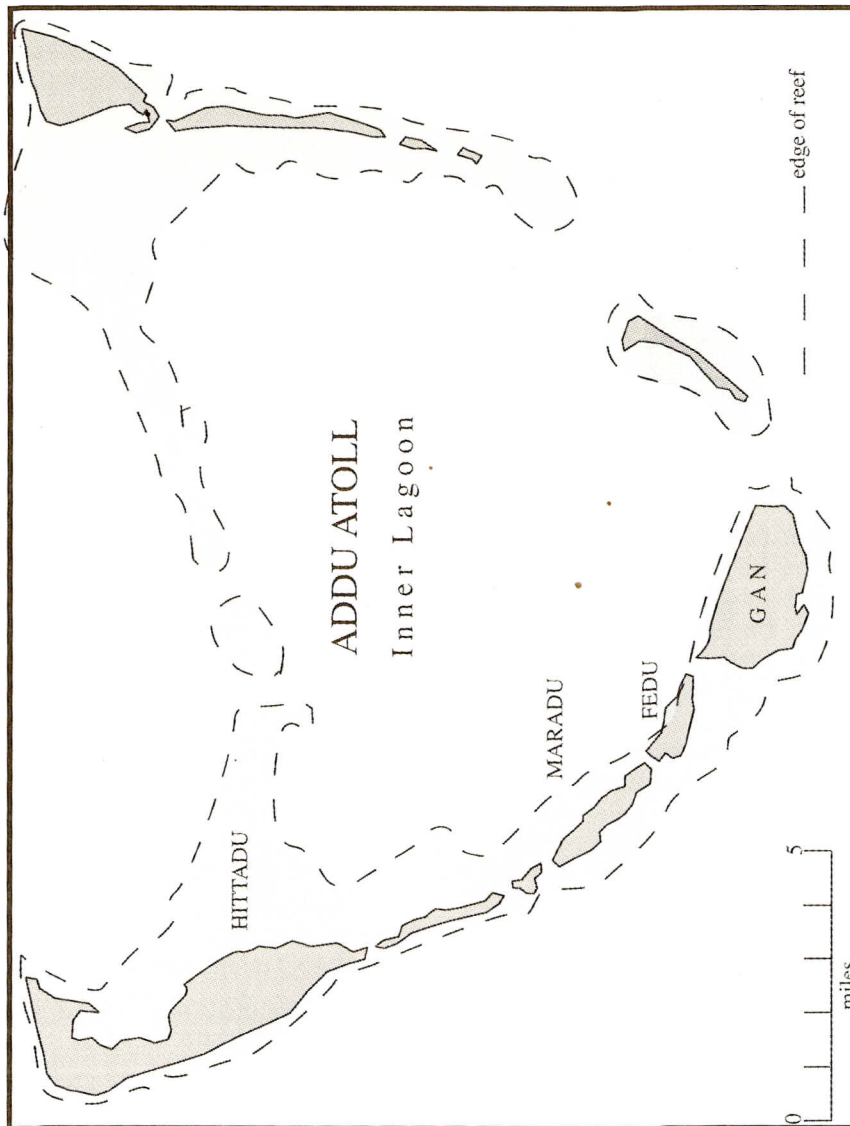
595 and 596 (RB) INDEPENDENT INDIAN ENGINEER COMPANIES

Compiled by Major DC Money

Some 550 miles south-west of Colombo lie the Maldivive Islands. The most southerly of them is Addu Atoll. Its ring of coral islands, at their highest only 5 feet above sea-level, enclose a deep-water lagoon 7 miles across. Each island is surrounded by partly-submerged coral reefs, widest towards the open ocean and separated from its neighbour by a channel through which tidal and storm water surges. Four of these channels are deep; the southernmost Gan Channel sufficiently so to admit the largest ships. The Maldivians traditionally occupied neat villages on the larger islands, their single-storey buildings thatched with woven palm-leaves (kaijan). They had long fished lagoon and ocean from locally-built oared boats with a single square sail, using a sturdier vessel to carry copra and dried fish to trade at Male or Colombo.

In 1942 the western islands of Addu were developed as a Naval and Air Force base, under naval command and code-named *HMS Maraga*. Its functions were to service naval ships, from battleships and aircraft carriers downwards, and to permit long-range reconnaissance flights over the mid-Indian Ocean. The development work was done initially by Royal Marine Engineers, 24 Artisan Works Company and a Sikh company of Pioneers. Agreement was reached to move the Maldivians from the western islands to the eastern villages, compensate them for coconut palms lost and supply a daily ration of flour, sugar and cigarettes. They provided thatching parties for the occupying force and undertook various small tasks for which they were recompensed. Gan became the main base and Navy HQ, with thatched huts serving as naval and military offices, workshops, accommodation and stores. The Air Force operated flying boats from Hittadu, the northernmost of the western islands, where they had hutted accommodation and refuelling facilities for Catalinas and (much later) Sunderlands. On Gan a coral-surfaced airstrip was constructed, almost the length of the island. It was used by one of the Navy's two amphibious Walrus aircraft, the other being cannibalised for spares. Then, almost fortuitously, an oil tanker *SS British Loyalty*, lying off Gan, was torpedoed via the Gan Channel, without damage to its tanks; it was made fast to the inner reef and, replenished by visiting tankers, was used to supply the ships and the service units.

During 1944-45, the Army units, under an OC Troops and Garrison Engineer, consisted of a company of the Dogra Regiment, an Indian Boat Company which operated ancient landing-craft, an Indian Military Hospital, an RIASC Supply and Bakery Unit, an IAOC Stores unit, an Artisan Works



Company and an Independent Indian Engineer Company of the RBS&M. During this period three RB Independent Engineer Companies, each about 220 strong and all-Sikh, served successively on Addu Atoll for six months each. The reason for this limited tour was generally attributed to the rather restricted diet - a few goats-on-the-hoof from Ceylon, some fish, but mainly tinned food, backed up by daily issues of ascorbic acid tablets. Another factor on the debit side was the effects of scrub typhus which had caused numerous fatalities during the early days of the atoll's occupation, though once it had been brought under control by vigorous spraying it gave no further trouble.

Each company travelled from Colombo in SS *Maharajah* which before December 1941 carried convicts to and from the penal settlement at Port Blair, in the Andamans (see Chapter 23). She proceeded to the Chagos Archipelago from Addu, then back to Ceylon, returning to Addu every three months. The RB companies which served on Addu were 595 (which nominally did so twice though in practice it was an almost entirely differently-composed unit which went there the second time) and 596. These Independent Engineer Companies were quite unlike any other RBS&M units. They only had two officers, the OC being a captain, but had five VCOs. There was an unusually high proportion of good tradesmen amongst the jawans, and they were single-class, all-Sikh, which was fairly unusual at that time.

595 Company were the first company to go to Addu, serving there from January to August 1944. They were commanded by Capt PB Button (who had previously been in 49 Army Troops Company in Iraq - a very different environment from that of Addu) and the Subedar was Chet Singh MBE OBI, who had been Colonel Cavendish's Subedar in 18 Field Company and was later to be promoted to Honorary Lieutenant. No specific details of the Company's activities during this first tour of duty are available but they were obviously on lines similar to those of the two companies which succeeded them. However Capt Button passed on at least one useful tip to his successor in 596 Company when he advised him to take plenty of sarson oil with his company as the jawans could be working under sea-water, which would have a very bad effect on the Sikhs' hair. This proved to be wise counsel when jetty construction meant working in up to six feet of water.

August 1944 saw the changeover from 595 to 596 Company, in which the key personnel were :-

OC	Capt DC Vaughan	2IC	Lt RW Ashford
Subedar	Harnam Singh (who had been a Jemadar in 2Lt PS Bhagat's section in 21 Field Company when he was awarded his VC)		
Jemadars	Banta Singh, Narayan Singh, Ram Singh, Udam Singh.		

As was the case with each Independent Engineer Company, there were responsibilities for the maintenance of roads which had been cleared and paved around and across Gan, across Fedu and along the length of Maradu. Bridges

over water channels, capable of carrying light tanks, linked these islands. Their short-span timber decks were carried on piers built directly on the bed of the channel but water-scouring tended to undermine the piers of concrete-filled sandbags, so that 596 Company replaced a number of these by piers of 2 inch tubular scaffolding, having uprights driven into the coral. Each company also worked to maintain the water supply, piped from a sectional steel tank on a tubular steel tower ensuring replenishment from a pit dug in mid-Gan. Maintenance of buildings, extending the Army Officers' Mess and providing a hangar for the Navy's Walrus involved recruiting Maldivian labour for kajjan thatching, so that the Engineer Companies became responsible for directing, supervising and paying Maldivian workers - often by an agreed quantity of flour, sugar and cigarettes.

On Hittadu 596 Company straightened the jetty carrying a vital fuel pipeline to the flying boats, constructing timber jacks to lift each jetty section in turn so that concrete padstones could be placed beneath re-aligned uprights. Working the jacks involved the unpopular underwater work, which was also subject at times to interference by large stingrays. Several prefabricated 75ft high timber wireless masts were also set up for the Air Force on Hittadu, while on Gan other sections created and dug-in a large timber gallows with a chain-block to replace a mobile crane due to return to Ceylon.

On 16 November 1944 the Supremo SEAC, Admiral Lord Mountbatten, with a small staff arrived by Mitchell bomber and an American crew, having overshot the island during a storm. Following an official reception and inspections of units, the Supremo re-boarded his Mitchell which took off, circuited the island but appeared to be in trouble and landed again. Refusing its doubtful service, the Supremo radioed Ceylon for a Sunderland and repaired to the Wardroom to await its arrival. He borrowed some trunks, swam in the lagoon, departing several hours later.

596 Company left Addu in February 1945 to reform at Kirkee as a Field Company, originally to train for Operation "Zipper" landings, but in the event they found themselves in Multan in West Punjab constructing a camp for screening JIFs, the former Indian soldiers captured by the Japanese and persuaded or coerced into fighting for them in the so-called Indian National Army before being recovered. Building this camp was 596 Company's last task before returning to Kirkee to disband.

Their successors on Addu were 595 Independent Engineer Company - but this was a reconstituted 595 Company. Sub Chet Singh was the only VCO remaining from those in the original company and his previous experience of Addu proved invaluable. The key personnel in the Company were now :-

OC	Capt DC Money	2IC	Lt JA Coombs
Subedar	Chet Singh SB MBE OBI	Jemadars	Kapur Singh; Mahanga Singh; Dewa Singh

Their tasks were much the same as those carried out by 596 Company, together with the construction of a second jetty on Hittadu. Sections were added to a tall radar tower on Gan and equipment brought from Ceylon was established on it with some help from the Navy. An improved cinema-cum-social centre, once more involving Maldivian *kaijan* thatching, was set up for all ranks showing current US, British and Indian films acquired at intervals from visiting ships. With sporadic engineering tasks, it was important to maintain military readiness and skills and this was achieved by carrying out controlled demolitions on old jetties on Gan and Fedu and by rifle-firing at targets set up on the shallow outer reef. Nor was sport neglected; like those of their predecessors, the company hockey team had a formidable reputation, being virtually unbeatable and willing to take on all comers including teams from visiting ships. The company suffered one casualty on Addu - not on the hockey field - a sapper who, contrary to official instructions, chose to doze beneath a 60ft coconut palm. He was removed to Colombo with a split skull. Despite this, the rapport within the company was excellent "with the exemplary Sub Chet Singh at the helm" as his OC stated.

In July 1945 the time came for 595 Company to leave Addu and return to Kirkee via Colombo. For some reason unknown then or now, the company were in a Mixed Transit Camp in Colombo for several weeks, with the consequent dangers from inactivity in an urban setting, whilst awaiting onward movement to India. Capt Money decided to fly to Kirkee to attempt to speed things up. HQ RBS&M responded so effectively that he was informed two days later that the company would be on the move at once. Being then held up at Bombay Airport by monsoon storms he arrived back in Colombo to find that the company had already left by train, under Lt Coombs. It turned out to be a somewhat bizarre journey. Near Trichinopoly the train was held up by dacoits, who looted the mail van. The delay then increased to the extent that the OC, having returned alone, was able to greet the company on their arrival at Kirkee.

595 Company then re-formed at Dighi, becoming a Field Squadron with a greatly enhanced complement of officers:

OC	Maj DC Money
2IC	Capt JA Coombs
Subalterns	Lts AJ Cooper, LW Wigg, PP Thomas

COMPILER'S NOTE ON SOURCES

No material was available regarding the activities of 595 Company during their first tour on Addu but details of the history of the base there and the activities of 596 and 595 Companies from August 1944 to July 1945 were provided by Maj DC Vaughan and Maj DC Money, the respective Company Commanders during that period.

PART II

WESTERN THEATRES

CHAPTER FOUR

EGYPT WESTERN DESERT AND FIRST CYRENAICAN CAMPAIGN

AUGUST 1939 TO JULY 1941

18 (RB) Field Company & HQ 4th Indian Division Engineers

Compiled by Brigadier DA Barker-Wyatt CBE

18 (RB) Field Company, whose origins date from the Bombay Lascar Pioneer company formed in 1777, is understood to be the oldest of the Indian S&M companies. It was also the first to serve overseas in WW2. The company was already in Egypt with the 11th Indian Infantry Brigade Group of the 4th Indian Division when Britain and France declared war on Germany in September 1939.

The company took part in the initial phase of General Wavell's successful first Libyan campaign against the Italians in December 1940 before being withdrawn at Christmas time with the rest of 4 Div, to help attack and destroy the Italian Army in Eritrea. Returning to the Western Desert in early April 1941, the company helped stem Rommel's first counter-attack until withdrawn again, a month later, with the 5th Indian Infantry Brigade to attack and overcome the Vichy French in Syria.

The background material for the chapter is taken from *Fourth Indian Division* by Lt Col GR Stevens OBE. The complete war diaries for the period of both the company and HQ 4 Div Engineers have provided some of their movements and activities. (Their part in the Eritrean Campaign is recorded in the next chapter and for the Syrian campaign in the following one.)

Move to Egypt August to October 1939

Although Italy did not enter the war on Germany's side until June 1940 her fascist dictatorship and her strong garrisons in Libya, Eritrea, and Abyssinia were a potential threat to British interests in the Middle East, particularly the Suez canal. It was therefore necessary to reinforce the British Garrison in Egypt without weakening the defence of the United Kingdom. The Indian Army was the natural choice to provide this reinforcement.

The mobilisation of 4 Ind Div started in July 1939. The divisional engineers under Lt Col RV Cutler with a Royal Bombay manned headquarters (HQ 4 Div Engrs) were 4 (Bengal), 12 (Madras) and 18 Field Companies and 11 (Madras) Field Park Company. The first unit to mobilise was 18 Company (Maj HP

Cavendish) on July 23 at Kirkee and on August 3 embarked and shipped from Bombay with the 11th Infantry Brigade Group (Brig AB McPherson MVO MC). Thirteen days later they disembarked at Port Tewfik on the Suez Canal and settled under canvas at Fayid Camp for ten days before moving to Mena Camp outside Cairo. A week later the company was on the move again with 11 Brigade to their first sight of the Western Desert, which, over the next three years, they got to know well. On September 3 they camped at El-Daba 140 miles west of Alexandria after leaving 3 Section at the Western Desert Engineer Stores base at Burg-el-Arab and passing through the then little known village of El-Alamein. Six days later the company moved on a further 50 miles west along the coast to Bagush 25 miles east of Mersa Matruh. There for the rest of September and all October they worked on wells and war supply tasks in which they would soon, by much experience, become expert. They also supervised civilian labour on road and defence works. Nevertheless some time was spent on military training, particularly bren gun drills and range practices. The September company strength, which probably included some first reinforcements, was 5 officers, 2 British NCOs, 6 VCOs, 9 Havildars, 253 IORs and 24 enrolled non-combatants (cooks and orderlies).

In November the company moved to Mersa Matruh beside a salt lake and was employed on water supply, camp and road works and also the installation and maintenance of electric lighting plant. Tasks in December were similar but with No 2 Section deployed to Burg-el-Arab, on camp works, water supply and laying Decauville track at Bahig. In January and February construction tasks included petrol pits, regimental aid posts, and "Beau Geste" type artillery observation posts and pill boxes. The company workshop was in full swing, enjoying a visit by the divisional commander (Maj Gen PG Scarlet MC CB).

Meanwhile HQ 4 Div Engrs had mobilised at Kirkee and shipped to Egypt arriving there on October 4. The rest of the divisional engineer units also arrived in October with the 5th Indian Infantry Brigade. They remained in the Cairo area (Mena Camp) mainly training, including some all arms and brigade exercises. At the end of March there was a full scale exercise for Cutler Force, an ad hoc group with all three field companies, a field battery, two infantry carrier platoons and a signals detachment under the CRE. 18 Company moved back to Mena Camp for the four day desert exercise which involved the company in laying 750 anti-tank mines and 150 yards of triple concertina and barbed wire. After lifting the mines and the wire the company returned to Mersa Matruh and back to work on construction and camp works, water supply and company military training.

Anticipating Italy's declaration of war, there was a redeployment of troops, particularly in the Western Desert, at the beginning of June. British formations and units were mainly deployed in forward areas back to Bagush. The 5th Indian Infantry Brigade became responsible for 80 miles of LoF protection from 10 miles east of Bagush to Amariya (15 miles west of Alexandria). The other 4 Div brigade, the 11th, remained at Mena under GHQ command as the only reserve

formation in the theatre. 18 Company handed over their works tasks in the Matruh area to a British Field Company on June 8th, and redeployed with the 5 Brigade. The company, less two sections, went to El Daba, No 1 Section to Amariya airfield and No 2 Section to Fuka. For the rest of the month the company worked on defence positions, particularly gun pits sited in rocky ground. Compressor power tools were much in demand.

Italy declares war June 10th 1940

By early June Hitler had struck down Norway, Denmark, Holland, and Belgium, and France was reeling with the British Expeditionary Force backed against the channel. Mussolini then decided to join in for the remaining spoils, particularly in North Africa.

On paper the odds in the Mediterranean were appalling. From the south and the west Egypt and the vital Suez artery were menaced by over a half million enemy troops. In Abyssinia and Eritrea there were ten Italian divisions. In Libya Graziani marshalled over 300,000 men. Against him Lt Gen O'Connor, commanding the Western Desert Force, had only one incomplete armoured division, two brigades of 4 Ind Div, together with scattered elements of British, Australian and New Zealand formations which barely comprised a division in all. The odds were more than five to one.

5 Ind Brigade in its encampments along the coastal dunes were the first Indian troops to see the enemy in war. Five wounded prisoners were brought into Daba dressing station on June 14. 11 Hussars shortly afterwards passed back a second party of Italians from the Frontier including a general and a number of women, one of whom gave birth to a child soon after capture. (Such an event would not have been thought surprising in later engagements with the Italians.)

After an 'Air Defence of Egypt' exercise in May, HQ 4 Div Engrs with 4(Bengal) and 11 (Madras) Companies moved up to Bagush where the Western Desert Force HQ was in course of construction. In June, with the Egyptian Western Desert frontier now directly threatened, more units were moved up from the Cairo and Canal Zone areas. However as hostilities had not been joined, this created a need for many more camps in the area. The garrison engineer organisation was inadequate to cope with the demand. In consequence the divisional combat engineers had to help out generally rather than specifically for their own formations. For a long fortnight after Italy declared war CRE 4 Div, with his HQ, was appointed as Deputy Chief Engineer Western Desert with other CsRE under command. However the overstretch of the engineer command and control proved unworkable and HQ Div Engrs were returned to their own formation, but some of their tasks were under the control of CRE CTE. One of the main problems was the provision of engineer stores and field engineer officers had to be specially tasked to speed procurement, supply and control.

18 Company at El-Daba were subjected to air raids on July 4. On the 11th they started work on "Jumbo" a splinter proof (shingle piled against 12ft high boards) secret radio direction finding (RDF) station for the RAF. An AA LMG was manned throughout daylight hours. Work continued on "Jumbo" also on gun pits and a Brigade HQ dugout for nearly a month. On Aug 9 the Company returned to Mena camp for ten day's rest, rekitting and training. The latter mainly concerned wiring and mine laying demonstrations to the infantry battalions of 5 Brigade (Brig WL Lloyd CBE DSO MC). During this period Capt NL Stuart left the company to attend Staff College and Capt JPA Jackson took over as 2IC. There was also a change of divisional commander, Maj Gen P Neame VC CB DSO handing over to Maj Gen NM Beresford-Peirse DSO.

On August 19 the divisional convoys navigated across the desert for the first time on tracks demarcated by numbered tar barrels which became a feature of the desert campaigns. By August 21st the division was concentrated around the old Roman wells at Bagush taking 16 British Infantry Brigade under command. The division was tasked to transform the deep nullah at Naghamish, seven miles east of Mersa Matruh, into an anti-tank ditch and prepare a fortified box to cover the coastal road and provide a bastion from which mobile forces could pivot in a battle of manoeuvre. 18 Company were with 5 Brigade at Gerawal 10 miles east of Mersa Matruh, but stores and plant did not start arriving until August 24. However, by the 31st two D4 bulldozers, several compressors and an 8 ton stone crusher were at work. A civilian labour force of 250 Bedouin had also been recruited. Work continued on the gun pits and pill boxes during the first half of September.

Italian air raids were frequent but not very damaging, although clearing their anti-personnel thermos bombs inhibited the progress on the defence works. The bombs exploded on being lifted from the ground. A naik in 18 Company was killed in the clearance work. Rifle fire, to set the bombs off, was ineffective. Lt Fraser, with five jawans, found that raking with a 100yd length of rope proved to be a satisfactory method of clearance. More disruptive in the progress of the defence works was the disappearance of much of the civilian labour - by September 17th only about 100 remained. Nevertheless progress in the company's construction tasks in the latter half of the month was better with two stone crushers and two concrete mixers at work. The company was completing pill boxes, each of 40 cubic metres of concrete, at one a day.

During this period 18 Company war diary record that the OC (Maj HP Cavendish) carried out several secret reconnaissances with the 5 Brigade Recce Group. Perhaps these may be connected with the reconnaissance mentioned in the *Fourth Indian Division* history during the same period. "Maj Jennings-Bramley, a retired British officer who had chosen the dust-bitten hamlet of Burg el Arab as his retreat, drew the attention of Divisional officers to the possibilities of the El Alamein bottleneck as a defensive position. Initial reconnaissance disclosed the importance of this area, with profound results in years to come."

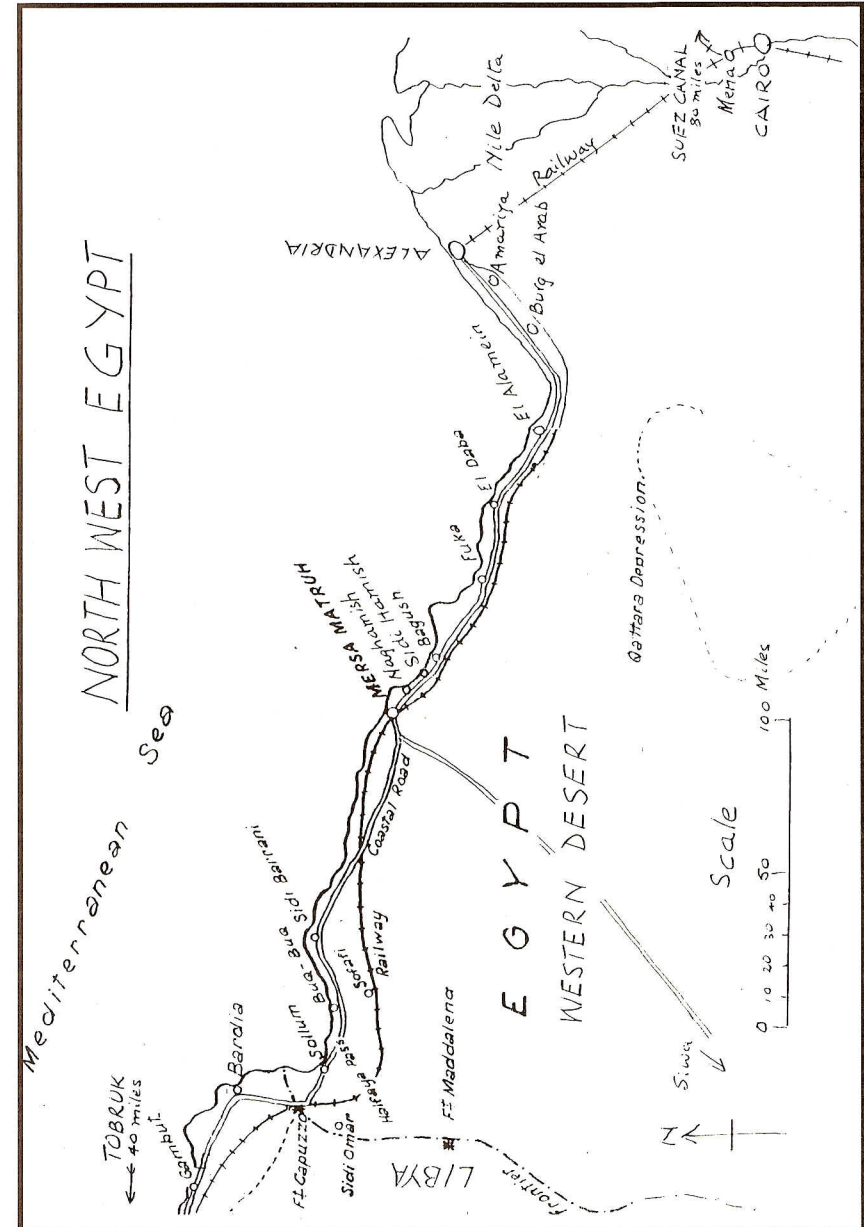
It was now over a year since 18 Company had arrived in the Middle East and the

arrival of reinforcements allowed some NCOs and sappers to return to India, although the overall IOR strength of the Company was 20% less than it had been in August 1939. Also during September Advance HQ 4 Div, together with their Engrs HQ, moved first to the Naghamish defence position and then back to the Bagush area. Their arrival there was heralded by the Italians dropping a number of thermos anti personnel bombs. The Engineers HQ field engineer and also the adjutant were kept busy destroying them by attaching a cable and pulling from a safe distance of about 100yds. Thermos bombs were also dropped in quantity in the Naghamish area. An unwary infantry officer and four other ranks were killed trying to pick them up. Rough harrows, towed by the lightly armoured carriers, were devised to deal with them, but for some time natural curiosity took its toll and the bombs were a considerable nuisance. Road and track maintenance problems were eased when a Scammell gun tower was obtained to tow a grader - 4 miles of road were graded in one day.

From mid-September "things started to hot up" and five Italian divisions crossed the frontier and captured Sidi Barrani forty miles inside Egypt. The elements of 7 Armoured Div which had been watching the frontier reported the enemy to be fortifying their new positions, instead of preparing to push on. Their camps were well stocked with ammunition, water and food, and their perimeters (except for certain inexplicable gaps) bristled with defensive obstacles. The freedom with which 7 Armoured Div's fighting patrols probed and harassed these encampments, moving boldly among them and even penetrating their perimeters, exhibited the patent weakness of the Italian dispositions. As a result, General Wavell started planning for an outright offensive.

18 Company continued on defence works in the Mersa Matruh/ Gerawala area in early October. Capt Sir Sher Mohd Khan visited the company during the period and spoke to all IORs. On Oct 9 the company moved back a few miles to Bagush and worked on concrete pill box construction on the hinterland side of the Naghamish/Bagush box area for the next six weeks. HQ 4 Div Engrs had, at the beginning of the month, issued specific designs and instructions for 2pdr Atk Gun, Bofors AA Gun, Bren and Atk rifle emplacements. Raids by enemy bombers were prevalent and the few remaining civilian labourers soon disappeared. Later in the month Capt PNN More (a Bombay sapper who, with Maj Cavendish, was later to develop much of the tactics of minelaying and breaching) visited the company from the newly arriving 7 Infantry Brigade, with whom he was a staff captain. Also at this time Capt Stuart, the former 2IC of the company, having completed the staff course, was appointed to the general staff at 4 Div HQ. On the last day of October a substantial force of Italian planes attacked the divisional areas. In a highly spectacular dog-fight nine Italian planes were shot down for the loss of two British Gladiators. This heartening show of increasing British air strength was seen by most of the division. An unexploded bomb was exploded by Lt Thompson, one of the HQ Engrs field engineers.

During the first three weeks of November HQ Div Engrs staged several trials



and demonstrations for the Brigades in anti-tank defence and methods of crossing anti-tank ditches and overcoming "hedge hogs". 18 Company continued with Pill Box construction, but some rest was needed and small parties were sent on local leave to Cairo for a few days while the rest continued work.

In recognition of 18 Company's achievements over the past fifteen months Maj Cavendish was appointed MBE. The citation, signed personally by General Wavell, the C in C, states:-

"Due to his (Maj Cavendish's) zeal and sense of duty the unit under his command has been maintained at a high state of efficiency. Since August 1939 he has commanded his company, serving continuously in the Western Desert. During this period a number of important Engineer Works have been successfully executed reflecting great credit on the Officer Commanding."

Western Desert Force Counter-Offensive December 1940

Although delayed by the need to send a large force of troops and air squadrons to Crete and Greece, preparations continued in November for a Western Desert counter-offensive. But with a force of only 31,000 men against one of 80,000, deception and surprise were essential. While the British 7 Armoured Div (the "Desert Rats") remained on watch at the front, without any build up of troops there, 4 Div with its 5 and 11 Brigades (7 Brigade was still in transit from India) and 16 British Brigade under its command made assault plans and preparations 100 miles to the rear. Exercises were conducted in the desert south of Mersa Matruh. A three-day all arms exercise including night marches was held at the end of November. Lt Gen O'Connor ordered another named "Corps Exercise" to start on December 8, but it was to be the real thing, made known only to the Brigade Commanders, the CRE and senior staff officers. (See map page 79)

18 Company's diary for the first four days of December merely records "training", but on the 5th most of the company was working on establishing forward dumps for the "exercise" along tracks known to be used by 7 Armoured Div. On the 6th the company came under the command of 11 Brigade (Brig RA Savory DSO, MC) and on the 7th received their orders for the operation. Meanwhile HQ Engrs had joined Advance Div HQ. After a very cold night 18 Company moved forward on the 8th with 11 Brigade Group (including a British tank regiment and the divisional artillery), in two columns each with eight lines of vehicles, 60 miles towards the enemy positions, which were being watched by elements of 7 Armoured Div. 25 miles south-east of Sidi Barrani they were met at dusk by guides from the "Desert Rats". The 4/7 Rajputs were detached for a feint eastern attack on Nibeiwa, the centre of an arc of Italian camps. The rest of the Brigade Group with the tanks, artillery and 18 Company moved north-west through the Bir Enba gap in a detour which carried the force five miles south of Nibeiwa. The infantry continued a further mile where two hours before dawn they deployed in battle order.

Thanks to the feint attack in the east by 4/7 Rajputs and routine reconnaissance

by 7 Armoured Div, the main Brigade Group strike force was not detected.

The Nibeiwa position covered an area approximately 2,400 by 1,800yds. The defence perimeter was complete all the way around, except for a small gap in the north west corner, and built up in the form of a wall with sangars. The absence of loose rock probably accounted for the shortage of "Dragons Teeth" around the camp. A special type of anti-tank obstacle had been constructed on the eastern and southern faces. Anti-tank minefields were laid all around the camp except on the north western face. There were no wire obstacles. Machine gun and anti-tank gun emplacements were built into every twenty five yards of perimeter, about a hundred and fifty in all - twice as many emplacements as any other camp possessed. The centre of the camp was a mass of earthworks with a few tents and about 250 vehicles widely dispersed.

Shortly after dawn on December 9 the artillery registered the enemy position and 7 RTR tanks moved forward with Bren carriers outriding on their flanks, which also provided some protection from the air. Only then did the Italians wake up. But it was too late to stop the assault through the north western gap in their defences where they had laid no guns or mines and the ramps and ditches were easily negotiable. The more heavily armoured British tanks burst upon the light and medium tanks, in leaguer outside the perimeter, while they were still warming their engines and smashed them to scrap metal and billows of black smoke. The tank attack swept on while the dazed Italians erupted from tents, and some from trenches, to either surrender or fight gallantly until cut down, as many were, including the general in command.

Fifteen minutes after the tanks hit the camp the Cameron Highlanders, with No 1 Section of 18 Company, followed their own screen of carriers through the gap in the perimeter, after debussing from their lorries and racing in with bayonet accompanied by the skirl of their bagpipes. Hundreds of the enemy threw up their hands but some resisted. Following on 1/6 Raj Rif passed through the Camerons and began mopping up in the eastern and northern areas of the camp.

Within an hour resistance was over. Some hundreds of enemy dead and wounded lay in the debris. More than 4,000 prisoners, including 80 officers, 25 tanks and scores of lorries and guns were taken.

Fifty minutes after the start of the assault by 11 Brigade Group the Divisional Commander ordered 5 Brigade, which had followed up in the wake of 11 Brigade, to bypass Nibeiwa to the west and head north-east towards the Tummar group of camps. 16 British Brigade followed to a reserve position to the west of Nibeiwa. From the ease with which 7 RTR tanks had broken through the gap in the Nibeiwa perimeter it would seem that Lt Plummer's section of 18 Company with the Camerons had little to do in the assault. However in 7 RTR's eagerness for the next phase with 5 Brigade, seven of their tanks shed tracks on mines while leaving the Nibeiwa position. This must have called for the sapper section's

mine clearing assistance, together with the Camerons' assault pioneer platoon.

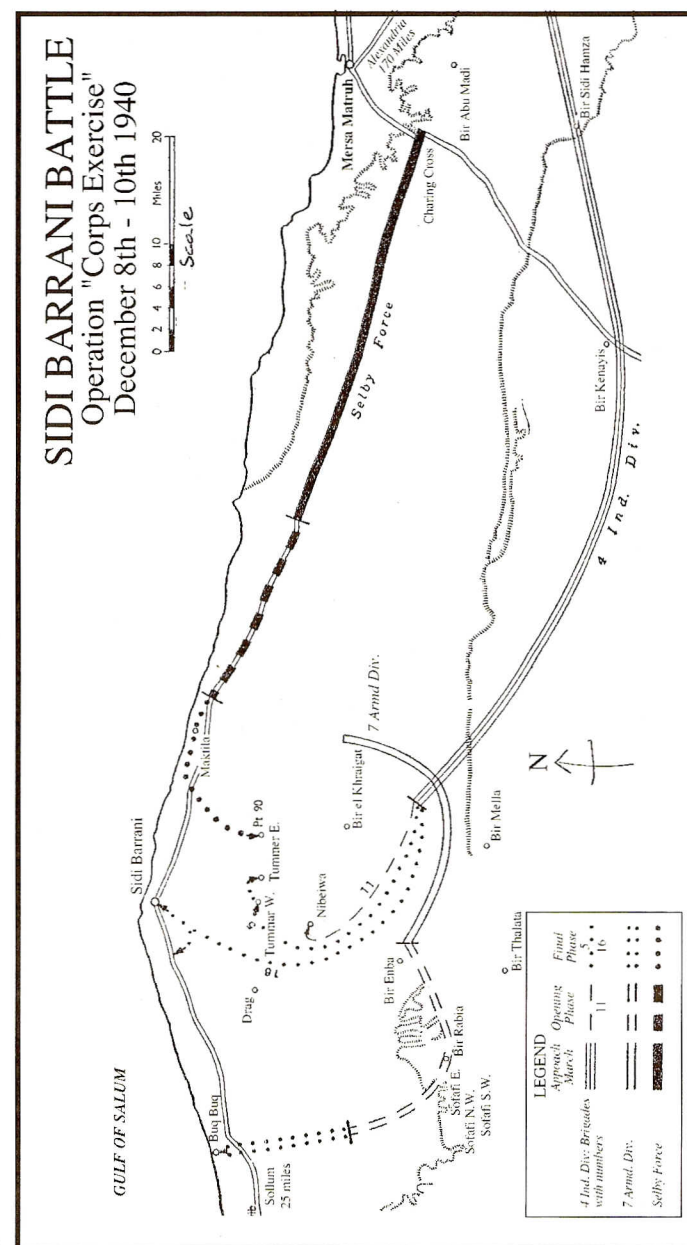
5 Brigade's advance on Tummar West was delayed by a dust storm and difficulties in navigation in very poor visibility. In consequence preparations to attack the camp with artillery and tank support were not completed until 1330. Nevertheless Tummar West was taken by the Royal Fusiliers, with few casualties, by 1600. Another Italian division had been destroyed and 2000 prisoners taken, again with negligible losses to 4 Div.

Within forty minutes of opening the attack on Tummar West the divisional artillery began to register on Tummar East which was next to be attacked. Just as it was about to be attacked by 5 Brigade's 4/6 Raj Rif the Italians launched a counter-attack from it on to Tummar West, but were defeated with heavy losses. The counter-attack had however delayed the attack on Tummar East which was called off just before dusk. 4/6 Raj Rif and the remaining tanks leaguered for the night between the Tummars. Thus in ten hours after the opening salvoes of the battle 7,000 prisoners had been taken, several hundred lay dead amid the wreckage of the camps and a thousand enemy wounded had been picked up. Forty tanks had been knocked out, over one hundred guns and several hundred vehicles captured. In the destruction of two enemy divisions, 4 Div had lost 5 officers and 17 men killed, 5 officers and 47 men wounded.

During the night it was decided that 5 Brigade should contain Tummar East while 16 Brigade advanced northwards. This they did at first light next day (December 10) in a heavy sandstorm, but came under heavy close range shell fire. At 0830 the divisional artillery was able to open fire and 16 Brigade penetrated the southern perimeter of the Sidi Barrani defences at 1230 capturing another 2,000 prisoners, although 4 Div casualties were higher than they had been the day before. In the meantime Tummar East had surrendered. By 1615 the attack on Sidi Barrani from the west went in and by last light a line had been established east of the shattered fishing village. The encirclement of all the enemy forces still at liberty in the coastal strip was completed during the night and by dawn on December 11 were pinned against the sea. They were cleared up during the day by 11 and 16 Brigades and the mobile "Selby Force", which had advanced along the coast.

In the afternoon of the same day, 5 and 11 Brigades were ordered to concentrate west of Nibeiwa for a night move to assault the south western group of Italian camps, but the operation was cancelled when news came in the evening that 7 Armoured Div had already taken them. The Desert Rats had also fallen on the disorganised enemy columns streaming westward from Buq and captured 4,000 prisoners. No organised enemy forces remained east of the Egyptian border. The Indian brigades unbriefed for long range pursuit were assigned to salvage work in then Sidi Barrani battlefield area and to the extraction of many thousands

of prisoners of war. 4 Div had by its own actions, at a cost of under 700 casualties,



destroyed four Italian divisions and taken more than 20,000 prisoners.

Lt Gen O'Connor's other formations swept on to occupy Sollum on December 16. The fortress of Tobruk fell at the end of January, and British and Australian forces sped on in early February across Cyrenaica to take Benghazi, cutting off more Italian formations, before coming to a halt with over extended lines of communication 200 miles further south. The news of the first major success over the Axis powers greatly boosted morale and the Allies chances of eventual success, particularly with popular opinion in the USA.

4 Div Engrs Support in the Early Operations

With the rapid pace of events it is not surprising that little is recorded in both HQ 4 Div Engrs and 18 Company war diaries. It is clear that Lt Plummer's No 1 section was with 2 Cameron Highlanders, in the first phase of the initial assault by 11 Brigade, thus making them the first Indian soldiers to come face to face with the enemy in a major engagement in the North African desert. No specific tasks are recorded for the rest of the company, which was under the command of 11 Brigade until 11 December, apart from water supply. Part of Lt Penny's section was assigned to this task. In the initial chaos of the captured Nibeiwa position the only water which could be found was in soda bottles in the Italian officers mess. Better than nothing, it was used to fill soldiers' water bottles. Later 6,000 gallons were found spread around in small dumps. As well as minefield locating, marking, and some clearing, the company also helped to evacuate 1,800 prisoners taken on the first day in Nibeiwa, and to salvage some of the serviceable enemy vehicles abandoned there. The company did not suffer any battle casualties, but two non-combatants, a cook and the Musalman barber, resting in a slit trench back in B Echelon, were injured when a lorry drove into the trench - always a hazard, especially in the desert where vehicle movement was mainly unrestricted.

HQ 4 Div Engrs remained with Advance Div HQ and on December 10 moved to Tummar West which had been taken the previous afternoon. For the assault operations the field companies had been put under the command of the infantry brigade groups. 18 Company with 11 Brigade for the first phase assault, 4 (Bengal) Field Company for the second phase with 5 Brigade and 12 (Madras) Field Company with 16 British Brigade for the third phase. With the successful conclusion of the first phase (Nibeiwa) 18 Company was taken back under the command of the CRE who was given the mammoth task of battlefield clearance as well as salvaging the spoils. The many enemy vehicles made serviceable were invaluable, as in the desert the rate of wear and tear and breakdown was high. Dust storms and enemy bombing hindered work on the 11th. By the 13th divisional engineer companies were back under the CRE's command for the salvage operations and for mine clearing or marking. He was not given long as the division was ordered on the 14th back to Bagush where it had been just a week before. On the 16th the division was issued with a warning order for a move

to a new theatre. On December 20 they were concentrated at Amiriya, close to Alexandria, where they spent Christmas and Maj Cavendish took over from Lt Col Cutler as CRE.

Cavendish was not only promoted to Lt Col but was also mentioned in despatches for his and 18 Company's achievements in the recent battle and in the subsequent clearance and salvage operations. The company's subedar Chet Singh was, for his outstanding leadership, awarded the MBE. In particular the diary records the salvage of Italian diesel lorries and their use, with 18 Company drivers, in ferrying prisoners back to Bagush as well as moving a newly arrived British battalion forward. The company, less two sections, moved back to Bagush on December 14 well equipped with twelve Italian diesel lorries and more prisoners. Next day Nos 1 and 3 sections joined them with more captured lorries and prisoners. From December 16 to Christmas the company was resting and training. Maj Cavendish left on 17th with Capt Stuart rejoining, on promotion, as OC.

Move to Sudan and Eritrean campaign - Jan to March 1941

HQ 4 Div Engrs and their companies moved to Port Sudan by ship from Alexandria during the first weeks of January. As there was insufficient shipping for all vehicles and equipment, 18 Company, because of their greater experience, were selected to send theirs on the overland route up the Nile. Logistic movement difficulties on reaching Sudan delayed their arrival at the front and the company, initially, had to borrow transport, engineer equipment and tools. Nevertheless the company spent more time at the forefront of the main battle for Eritrea than any other engineer unit, including those of 5th Ind Div who had been in the Sudan since September. (See Chapter 5)

The crucial drawn out Keren Gorge battle, which was inconclusively fought initially by 4 Div and then by 5 Div, required both divisions in the hard fought final assault. As soon as it was over on March 29, 4 Div was withdrawn to hurry back to the Western Desert where the German General Rommel, who had become the Axis commander there, was now advancing.

Return to the Western Desert - April 1941

18 Company now with 5 Brigade (Brig WL Lloyd MC) were back at Mersa Matruh on April 13 just as Rommel had succeeded in pushing the denuded British forces back across Cyrenacia. From Greece and Crete only half the force of 60,000, which Gen Wavell had sent, returned, and their units had to be reformed. During March, while the Royal Navy had been in Grecian operations, six Italian and three German (Afrika Corps) divisions had been ferried to North Africa. With these reinforcements Rommel had destroyed 2nd British Armoured Div and was besieging two Allied divisions in Tobruk. For the defence of Egypt General Wavell could muster only five infantry brigades and only enough tanks

for part of one armoured brigade. Although more units from the Abyssinian campaign, including the South African division, and reinforcements and tanks from the UK could be expected in a few months, it was vital that Tobruk be held in the meantime. It was also vital that the defences within the Egyptian border should be refurbished and manned while plans and preparations were made for a counter-attack to free Tobruk, where over half the Western Desert Force was besieged. General Wavell also had to cater for possible operations in Syria where the Vichy French were collaborating with the Germans, and in Iraq and Persia, where German sympathisers were active.

18 Company's war diary states, not surprisingly, that on arrival in Mersa Matruh on April 13 it received "various orders and counter-orders to establish defence positions." On the 14th they moved to Aghaitish, then on the 18th to Bagush, but on the 22nd they were at "a new position between Sidi Haneish and the escarpment" where they remained until May 15. During this period of over three weeks Nos 1, 2 and 3 sections spent much of their time working on 1 Royal Fusilier, 3/1 Punjabi, and 4/6 Raj Rif defence positions respectively. (This undoubtedly helped cement relationships for close cooperation in subsequent Syrian operations.) An anti-tank ditch was also built together with a road block on the escarpment road. Bad dust storms prevailed at the beginning of May and the diary also records that No 3 section was dealing with a contaminated well, but not how. From May 5 to 15 the company were, with 1209 Pioneer Company under command, laying anti-tank minefields using Egyptian pattern mines, which were dangerous to lay and still more so to lift.

It must have been a considerable surprise that suddenly the company was told to pack up and move, with the rest of 5 Brigade, to the Canal Zone on May 16. From there they went on quickly with the brigade to the Palestine and Trans Jordan to take part in the vicious campaign against the Vichy French in Syria. (See Chapter Six)

HQ 4 Div Engrs, together with 4 Div HQ and their other two brigades and field companies were two weeks behind 5 Brigade and 18 Company in leaving Eritrea and Sudan for Egypt, and did not reach Bagush until the beginning of May. Over the next three months the CRE (Lt Col Cavendish) and his headquarters issued prolific works instructions and orders concerning mines and booby traps, wire obstacles, and anti tank ditches. The German Tellermine had just been encountered and needed investigation, so recovery was desirable where possible. Instructions were issued for using sharp pointed sticks or bayonets for searching and detection, as did the Germans. GHQ Cairo was continually pressed with ideas and requests for "detector instruments" and air bag (lilo type) broad soled boots for searchers. Other suggestions included fixing ploughs or rooters on the front of heavy infantry (I) tanks or on specially armoured vehicles. Most of these ideas were eventually refined and adopted before the end of the war. Other instructions were issued regarding the construction of wire obstacles and anti-tank ditches so as to make them more difficult for infantry than

many of those which had been previously been built. The disadvantages of too much improvisation with booby traps were stressed. Lt Carter, one of the HQ field engineers, who had been previously a section officer with 18 Company, was sent to GHQ Cairo in July with suggestions for standardising the practice of making anti personnel mines with captured Italian hand grenades, also for making another device known as the "watch dog alarm". The degree of work involved in producing these ideas and instructions is manifested by the welcome posting of two British draughtsmen (a sergeant and a sapper) to HQ 4 Div Engrs. It may have been for this period of intense staff work or earlier ones in 1940 that Hav Clerk Mohd Akbar was mentioned in despatches.

"Operation Battleaxe" in the Halfaya Pass area in mid June included 11 Brigade with two British brigades (4 Armd and 22 Guards). 4 (Bengal) Field Company did some gallant mine clearing at a critical stage, but the main objectives of the operation were not attained. British losses included 1,000 killed and wounded and 96 tanks destroyed. However, in spite of their superior armour and fire power, 50 German Panzer tanks were knocked out, showing that they were not invincible. Nevertheless, the best that could be said for the operation was that, as a holding and delaying action, it prevented an early enemy attack on the besieged Tobruk.

The narrative returns to events in North Africa from August 1941 to November 1943 after the next three chapters.

Nominal roll of those known to have served with RBS&M units

HQ 4 Div Engrs (Previously Deccan Force Engrs)

CsRE	Lt Col RV Cutler MBE MC	Sep 39-Dec 40
	Lt Col HP Cavendish DSO (Eritrea), OBE*	from Dec 40
Adjutants	Capt DG Boyd	Sep 39-Dec 40
	Capt IB Taylor	Dec 40-June 41
	Capt DCS David	from June 41
Field Engineer	Capt OGarett	from Jan 41
Subalterns	Lts AD Bell, LA Thorpe, DR English	from Sep 39
	Lt L MacL Beattie	from April 40
	Lts TA Creamer and AOB Thompson	from July 40
	Lt RD Penny (wounded in Eritrea)	Jan 41-April 41
	Lt WG Carter	from 18 Fd Coy May 41

For the short time in June and July 1940 when the HQ was responsible for works in the Western Desert three garrison engineers were attached to speed the procurement, supply and control of engineer stores.

Medical Officer	Capt RH Loughran IMS	from May 41
RSMs (Attached)	K.Gourley	Sep 39-March 40
	J.Knifton	April 40-Sep 40
	M.Hayward	from Sep 40
Hav Clerk	Mohd Akbar*	

18 Field Company

OCs	Maj HP Cavendish	Aug 39-Dec 40
	Maj NL Stuart* (Eritrea)	from Dec 40
2 ICs	Capt NL Stuart	Aug 39-July 40
	Capt JPA Jackson	from July 40
Subalterns	Lt JPA Jackson	Aug 39-Dec 40
	Lt EM Hall	Aug 39-Dec 40
	Lt W Loving	Aug 39-early 40
	Lt BAA Plummer	from Oct 40
	2Lt CC Fraser	from April 40
	2Lt WG Carter	Aug 40-May 41
	2Lt RD Penny	Oct 40-Dec 40 and from May 41
Subedars	Chet Singh MBE*	Sep 30-Dec 40
	Rehmat Kahn IOM (Eritrea)	from Dec 40

* signifies Mentioned in Despatches.

Decorations awarded for actions in Eritrea are so indicated.



Mine Clearance

CHAPTER FIVE

THE NORTHERN ABYSSINIA AND ERITREA CAMPAIGN

AUGUST 1940 TO AUGUST 1941
HQs 4th and 5th Indian Division Engineers
18 (RB), 20 (RB) and 21 (RB) Field Companies

Compiled by Brigadier DA Barker-Wyatt CBE

The campaign was probably unique for WW 2 in that no British formations took part in it. It was fought by the 4th and 5th Indian Divisions and the Sudan Defence Force, although each of the divisions' three Indian infantry brigades contained a British infantry battalion, as well as an artillery regiment. All the combat engineer units were from the Indian Sappers and Miners. Half of the six field companies with the six infantry brigades were from the Royal Bombay Group. Two were from the Bengal Group and one from the Madras Group. Both divisional engineer headquarters (HQ Engrs) - staff units - were provided by the Royal Bombay Group. Both the small (captain's command) divisional field park companies were from the Madras Group. Further back the main engineer logistical support under the Chief Engineer was provided by two army troops companies of the Bengal Group, and a Madras Group workshop and park company. The nominal strength of the RB field companies serving in the campaign was approximately 260 all ranks, divided into a company headquarters, with transport, workshop, and other support elements, and three field sections (Punjabi Musalman, Mahratta, and Sikh) each of about 60 men.

The outline of the campaign operations and events are taken from Anthony Brett-James's *Ball of Fire the Fifth Indian Division in the Second World War* and Lt Col EWC Sandes's DSO MC RE *The Indian Engineers 1939-47* and Lt Col GR Stevens's OBE *Fourth Indian Division*. Details of 18 and 20 Field Companies, and both Div HQ Engrs are mainly taken from their war diaries and notes, and anecdotes, by Maj Gen JHS Bowring CB, OBE, MC, commanding 20 Company for most of the campaign, and Maj WG Carter who was a subaltern in 18 Company. Although all the monthly war diaries for 18 and 20 Companies and the two divisional HQ engineers were available, those for 21 Company, for the whole of the campaign, could not be traced. It has also not been possible to trace anyone who was in the company at the time. However, 2Lt Bhagat's VC and the company's associated operations are well documented, particularly in Compton Mackenzie's *Eastern Epic* Volume 1 and in Lt Gen Thomas' PVSM and Jasjit Mansingh's biography of Lt Gen PS Bhagat PVSM VC. Some scanty information on the company later in the campaign was gleaned from 5 Div HQ Engineers' diary and other units with whom they worked at various times.

The Sudan - Summer 1940

The political and military relations with the Italians on the Sudan borders with Abyssinia and Eritrea had been very friendly right up to Italy joining up with Germany in June 1940. Thereafter the GOC in C Troops in the Sudan - the Kaid (Lt Gen Platt) was threatened with invasion by the quarter of a million strong Italian Colonial Army. Their only opposition was the small and lightly armed SDF, who "made faces" up and down the 1,200 mile frontier, and, initially, one British infantry battalion of the Worcestershire Regiment. The Italians quickly occupied the Sudan border towns Kassala and Gallabat as well as overrunning British Somaliland and making incursions into Kenya on their eastern and southern borders.

5th Indian Division - August to December 1940

With our forces in Egypt and the Western Desert fully committed, the Sudan had to be reinforced from India. The advance party of 5 Div (Maj Gen Heath), which included the small engineer headquarters (HQ Engrs - a RBS&M HQ unit) reached Port Sudan in mid-August 1940. The main elements of the Division left Bombay at the end of August in a forty ship convoy. Combined messing was accepted by all classes aboard the ships. Surprisingly the convoy, although bombed from a great height by Italian S79s from Eritrea, arrived unscathed in mid-September at Port Sudan. There the 9th and 10th Indian Infantry Brigades disembarked but the 7th Brigade sailed on to reinforce Egypt and the Western Desert operations. All the Divisional Engineer units which included two RB Field Companies, 20 Company (Maj St George) and 21 Company (Maj Philbrick), disembarked at Port Sudan and moved 50 miles inland, into the hills, to Gebeit which was their main base. Maj Gen Bowring, who was then 2IC 20 Company, describes the Sudan terrain as mostly bare desert, except in the Red Sea hills, which resemble the Indian North-West Frontier, and in the south which is more wooded and includes a large cotton growing area.

The CRE (Lt Col Reid) and his adjutant (Capt Winchester) were translated to the Kaid's Headquarters in Khartoum and Maj St George became acting CRE until the arrival in mid-November of Lt Col Arthur Napier of the Bengal Sappers. Capt Bowring became acting OC 20 Company. Initially the main sapper tasks concerned opening up routes, water supply reconnaissance, camp works and the preparation of demolition schemes in the event of a withdrawal. Bowring, sizing up a water tower at a rail junction, was met by an ex-Naval Petty Officer working with the Sudan Railways who exclaimed "Cor blimey - if any more of you come looking at that tower, the damned thing will fall down from trembling!" On another day he met a normally very ribald member of the CRE's staff in the middle of the desert in a howling dust storm and saw him looking surprisingly glum. On being asked why, he replied "I was just thinking wouldn't it be awful if we lost all this!"

On October 19th HQ Engrs and 21 Company moved to Gedaref, on the railway between Kassala and Sennar. On the 26th 21 Company came under command of 10 Brigade (Brig Bill Slim) for operations on the Abyssinian frontier in the Gallabat area. 20 Company followed to Gedaref on November 1st and for the next six weeks were employed in engineer reconnaissance, road construction between Doka and Gedaref, and in building works for an advanced base at Qala'en Nahl, some 40 miles south west of Gedaref. It was made to resemble a native village with circular grass hut. The history of 5 Div records that the few roads in the area were badly corrugated and that the sappers were constantly at work levelling them off with graders and towed harrows. Maj St George resumed command of 20 Company on November 11th when Lt Col Napier (known by his officers as "Uncle Arthur") arrived to be CRE.

Bowring remembers that the country in the Gedaref area was more wooded with spotted deer and guinea fowl to shoot for the pot. They camped in one particularly attractive spot which was called Khasm el Girba - the abode of bees (some 80 miles NE of Gedaref) and this caused some concern, as African bees are very fierce and dangerous when aroused. One day Bowring was astonished to see a file of "disruptive camels (ie camouflage painted) winding through our camp." They were a column of Abyssinian irregulars led by Wingate, who was aiming to restore the Emperor Haile Selassie to his throne, and they were irreverently known as "Tiger Tim and his Revolting Abyssinians". Luckily the bees did not mind. Although there was not much aggression from the Italian Army, their Air Force was active. On November 18th Gedaref landing ground was bombed and anti-personnel mines were dropped in 20 Company lines. One bomber caught fire and crashed - a sapper was convinced he had shot it down with his rifle.

21 Company with 9 and 10 Brigades - Nov 1940 to Jan 41

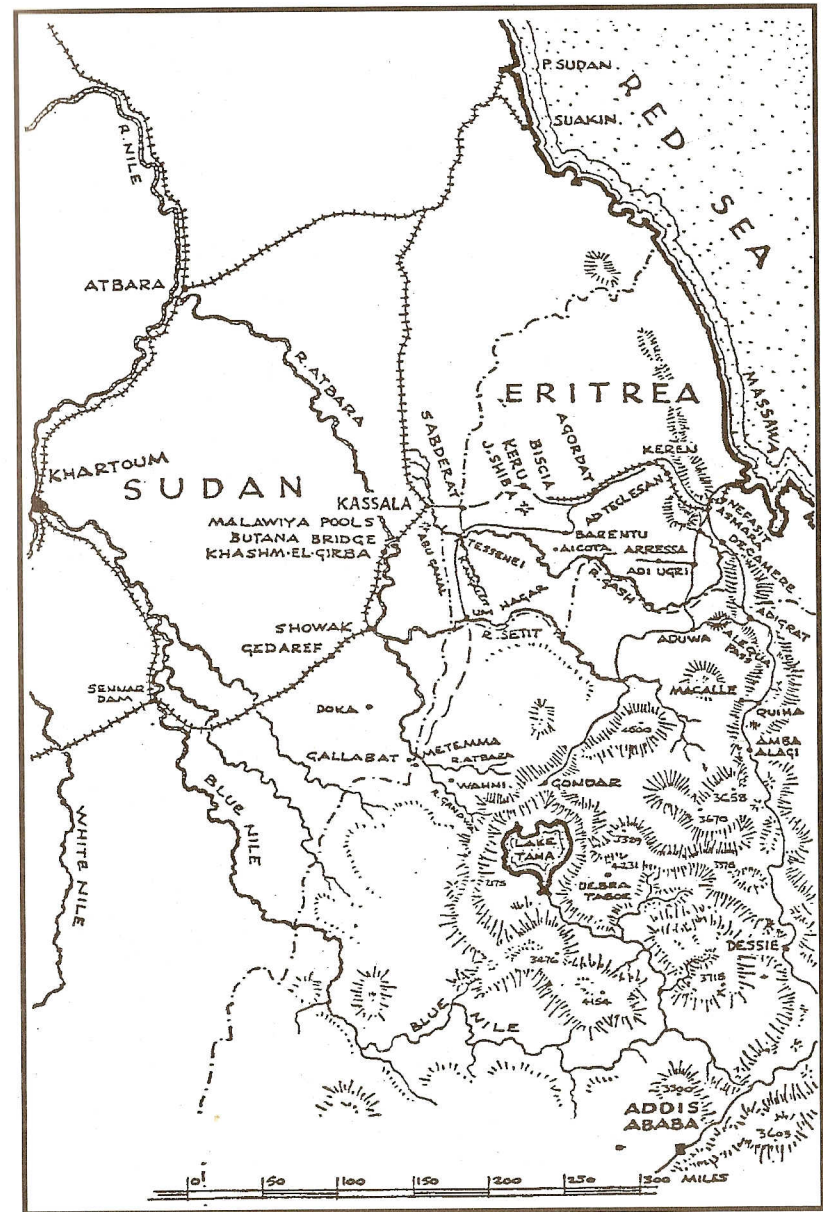
Meanwhile early in November Brig Slim's 10 Brigade, with 21 Company, advanced on Gallabat. On the night of the 5th the 3/18 Royal Garhwal Rifles (Lt Col Tayler), with No 2 Section 21 Company, led the way in Bren carriers to the fort. Lt Patterson, the section commander, was mortally wounded when his carrier hit a mine. 2Lt Bhagat, his section officer, took over command of the section. The enemy was well dug in and the final assault was held up by intense defensive fire and some troops started to retreat, but one Garhwal company and the sapper section hung on. Lt Col Tayler, standing firm where he could be seen by his men, although vulnerable to enemy fire, stopped the rot. He was joined by 2Lt Bhagat who saw that Tayler's arm had been wounded by shrapnel and reached out to help him, but the Colonel ordered him to stay put and not to let the men know that he (Tayler) had been wounded. He kept standing until order was restored and only then did he seek first aid assistance. Bhagat, in his own words, "was stunned with such cool bravery and total dedication". It undoubtedly had an influence on Bhagat's subsequent actions.

The fort was captured and held for the next two days in spite of sustained bombing from the air and heavy counter-attacks which were beaten off with the help of supporting tanks. It was impossible to dig into the rocky ground and there was no air cover. The enemy held air superiority. Casualties were mounting and it became necessary, in the evening of the 7th, to withdraw to the fort's outpost line. The sapper section was almost the last to leave after destroying much of the usable buildings and stores in the fort. The gunners also shelled it and, setting off an Italian ammunition dump, provided a spectacular display. Next day the enemy, closely following up, had to be delayed at a culvert bottleneck. Two derelict tanks packed with explosive were fired but only one detonated leaving the culvert still partly intact. Under small arms fire and air strafing 2Lt Bhagat broke cover to reignite the failed charge and completed the destruction of the culvert. Maj Philbrick witnessed this incident and recommended him for an MC, but it seems that it was subsequently revised to a Mention in Dispatches which was notified after 2Lt Bhagat's immediate VC award two months later.

Slim's policy was not to reoccupy the fort but with vigorous patrolling, including re-entry on November 9th and 10th, to deny it to the enemy. The Brigadier was already recognized as a brilliant leader. At about this time, during an informal visit to a unit, a soldier shouted out "Don't you worry Sir, we'll follow you anywhere" to which Slim replied "Don't you be so b.... sure of that; I'm going to follow you".

In December 10 Brigade was relieved in the Gallabat area by 9 Brigade (Brig Mayne) but Slim's policy of denying the fort to the enemy continued. 21 Company, who had built a landing ground in the area in late November, was transferred to 9 Brigade for their close support. The aggressive tactics during the latter part of December and January continued. Gallabat was retaken in a night attack, but the village on bare ground sloping towards enemy positions on the other side of a Khor could not be held. The 3/5 Mahratta Light Infantry dug in to the west of the village and harassed the enemy every day for six weeks. There was also a highly successful raid to upset an enemy airdrome close to Metemma, by 3/12 Frontier Force Regiment and 2Lt Bhagat's section of 21 Company. Much damage was done and Bhagat again distinguished himself in carrying out demolitions regardless of personal danger.

All through December 9 Brigade was busy with 21 Company, and continued help from 20 Company, blazing a line of communication trails through the 80 miles of bush and forest from the base at Gedaref to its forward positions which were spread out on a divisional front. Dummy dumps, medical posts, and landing grounds were laid out. 20 Company even made a dummy bomber on dummy strip. It was all part of the deception plan to make Italian intelligence suppose that the main thrust would be towards Gondar in Abyssinia, and that the indications to advance beyond Kassala into Eritrea were a bluff.



4th Indian Division arrival from Western Desert - Jan 1941

General Wavell's successes in the Western desert and Cyrenaica in December allowed him to transfer 4 Div (Maj Gen Beresford-Pierce) to reinforce the Sudan. This enabled Lt Gen Platt to take the offensive into Eritrea while Lt Gen Cunningham advanced into Abyssinia from the south and east. Earlier two British battalions had been sent to the Sudan, and by a redistribution of battalions with those of 5 Div; a third infantry brigade (29 Brigade, Brig Marriott) had been added to 5 Div. The move of 4 Div south to the Sudan was partly by the Red Sea and partly up the Nile. 11 Brigade arrived at Port Sudan early in January 1941 and was followed by 5 and 7 Brigades and the divisional engineers, less 18 Company transport and equipment. The CRE was now Lt Col Cavendish (previously OC 18 Company). 18 Company arrived at Gedaref on January 17th but without their transport which had moved up the Nile through Khartoum and did not reach them until February 4th. The last part of the journey from Atbara, for the vehicles and most of the company equipment, was by train. Army HQ movements forbade them to move by road (use of it was being restricted to prevent further deterioration) from Atbara, and there was a shortage of rail flats which delayed them for nearly two weeks. The Company OC (Maj NL Stuart) was not pleased.

Lt Gen Platt's plan for the conquest of Eritrea was for 9 Brigade, with 21 Company, to hold the enemy in the south by deceiving them into thinking that it was the main point of attack, and also by the limited offensive actions into Abyssinia already described. The main thrust was to be in the north from Kassala, spearheaded by Gazelle Force (Col Messervy), a mobile formation based on SDF armoured cars and mobile machine guns. The role of 5 Div's 10 and 29 Brigades, after the reoccupation of Kassala, was to take Tessenei and Aicota on the main road to Agordat while 4 Div's 11 Brigade and Gazelle Force pushed through to Keru on the minor road to Agordat.

20 Field Company

In late December and the first half of January, 20 Company were employed on opening up wells and setting up water points on the routes to Kassala and the frontier, and providing temporary camp structures for their 29 Brigade units. Water supply was a major problem throughout the campaign as there was often rapid and extensive movement forward. Bowring recalls that it was unnerving to find at the end of a day's move, all the brigade's water trucks lined up in complete faith that the sappers would somehow miraculously fill them. In the dry season, the river beds dried up into khors. These could be quite wide, and somewhere below, at a depth of 20 to 30ft or so, wound a perennial stream. In places narrow wells dug by locals for their camels occurred. Where there were none, it was necessary to dig, and the problem was to locate the underground stream across the sandy bed of the khor. When in the Gedaref area and prior to the advance over the frontier, 20 Company was assisted by Capt Houghton (the

2IC of 21 Company) who was a skilled dowser. Water so divined could easily be tapped by sinking prefabricated sections of tubing. Sinking wells blind was hopeless except in obvious places. Although Houghton could dowse for his own company throughout the campaign, he was rarely able to help 20 Company after the advance had started.

Harassed continually by Gazelle Force, the enemy had by mid-January begun to withdraw to a defensive line along the edge of the high plateau running from Keren southwards into Abyssinia. This allowed 5 Div to start moving forward in the Kassala area. On January 11th the 10th Brigade captured the wells from which the Italians drew their water, and cut their main line of communication from Tessenei to Kassala. Six days later the enemy slipped out of Kassala despite proclamations to the townspeople that the "absurd" British-Indian forces would be "scattered like chaff". Amongst papers found after the Italians' hurried departure was a copy of a signal to their brigade - "Am surrounded will fight to the last for the honour of our Duce and empire", and the reply: "Don't be theatrical. State hour of withdrawal."

Tessenei was occupied on January 18th by 29 Brigade with 20 Company in close support. The company, making extensive use of guncotton slab shattering charges, started clearing the approach to Agordat for the brigade's attack on the town which was eventually mounted on 31st. The defending armour was knocked out, the town captured and the enemy's line of communication to Keren was cut. However, further advance beyond Agordat was held up by very difficult terrain.

HQ Engrs 5 Div was on the move forward of Kassala by the end of January and on 30th ordered 20 Company to deploy a section to improve the rough road from Aicota to Bishia, the latter being the Eritrean railhead for the line from Asmara and from Massawa on the Red Sea.

18 Field Company - Late January to early February 1941

No 3 Section of 18 Company left Kassala in makeshift divisional transport on January 26th to assist other 4 Div Engineers on the Keru route. On 28th and 29th they were working on clearing Bishia airfield and the construction of a POW cage 15kms from Agordat. On 30th the Section moved beyond Barentu, with 2 (Bengal) Field Company, to work, with the loan of a compressor truck from 11 (Madras) Field Park Company, on clearing a substantial road block. It had been blasted into 100yds of hillside and left strewn with large granite boulders. They worked, under shellfire throughout the night, in shifts of one NCO and ten sappers. They were machine gunned by Italian planes during 31st but a single track was opened through the block by 1600 without casualties. On February 1st other blockages were cleared including many enemy dead and wounded, some from vehicles. On the 2nd they moved forward at first light to help 12 (Madras) Field Company build a temporary bridge, to get Gazelle Force

over the Baraka river, where the "Pont Mussolini", had been demolished. Its approaches on high embankments had been extensively cratered and mined. They completed a temporary crossing during the day and then moved to work on a second crossing point one mile upstream. By mid-afternoon 29 mines had been cleared and, by last light, a log crossing had been half completed. Work continued from 3rd to 6th making the crossing two-way, clearing another 43 mines as well as constructing a twelve-mile diversion route. The other two sections of 18 Company, who had been dismantling barbed wire in Kassala from 1st to 4th, joined in on the work on 5th and 6th. A sapper in No 1 Section was killed stepping on a mine. They continued working on the diversion route on 7th and 8th while the company HQ, now with its own transport at last, moved to a camp 3kms beyond Agordat.

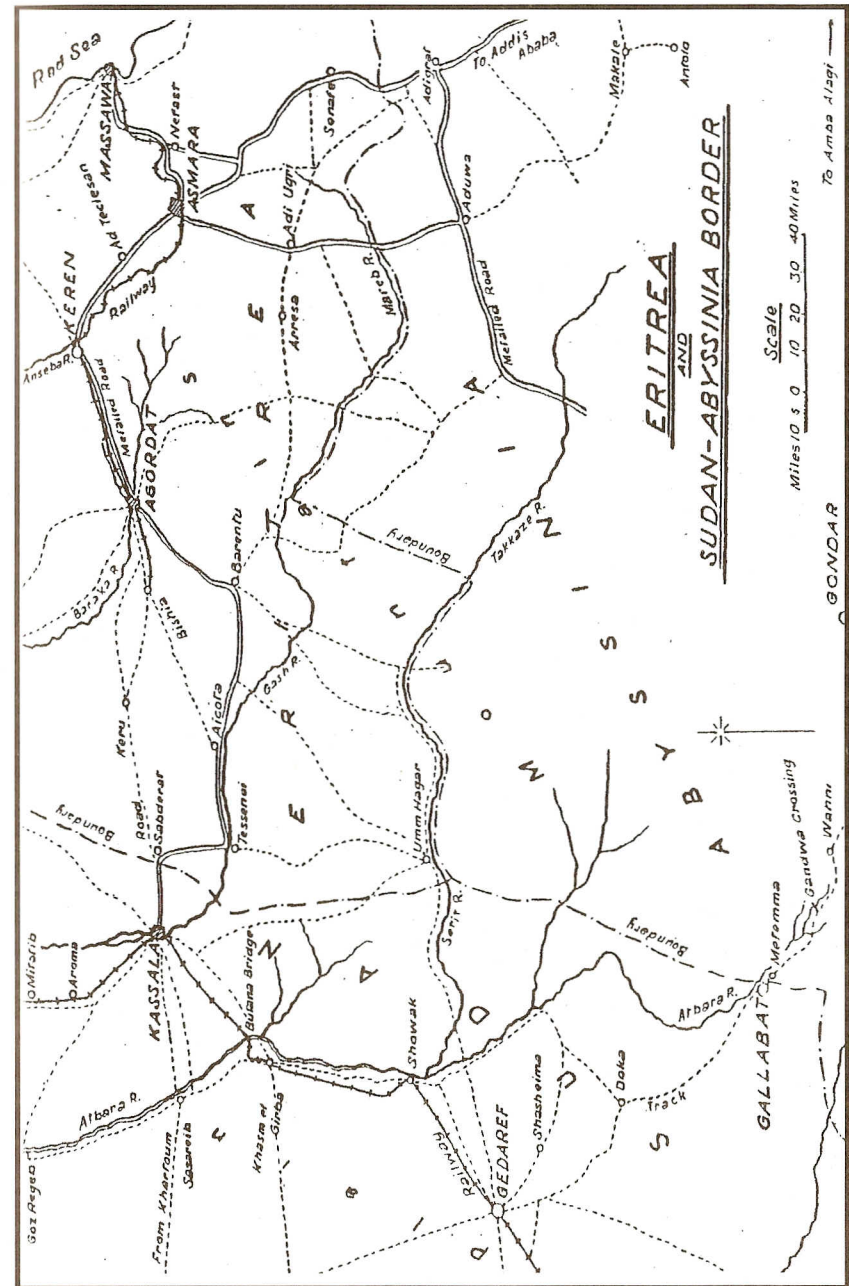
The next great obstacle was the heavily defended Keren gorge which could not be outflanked. The SDF armoured car and MMG groups had endeavoured to do so by using tracks through the mountains east of Barentu to Arresa and Adi Ugri but the terrain was difficult and any route easily defended by small parties of enemy. The tough nut of the Keren gorge had therefore to be cracked. After the failure of two gallant attempts by 5 and 11 Brigades of 4 Div, and one by 29 Brigade of 5 Div, to break through, there was a pause in operations to allow a build up of reinforcements and logistics.

Meanwhile operations, of great significance to the RBS&M were taking place on the 5 Div Abyssinian front further south.

9 Brigade and 21 Field Company - Early February 1941

Although 9 Brigade's role to hold the enemy in the Gallabat area was a secondary one, events for a section of 21 Company were dramatic. The minor operation around Gallabat ebbed and flowed during December and most of January with the Italians back in the fort and holding on tenaciously to Metemma. However before the end of January it was obvious to the enemy that General Platt's main thrust would not come from the Gallabat direction. Therefore, as a first step in the general withdrawal to the high ground in conformity with their forces in the north, the enemy vacated the fort on the night of January 30th. Brig Mayne immediately sent a small mobile column to probe Metemma and beyond to Wahni on the road to Gondar. The 3/12 Frontier Force Rifles Column (Lt Col Blood) included a detachment of 21 Company under command of 2Lt Bhagat. At first it met with no resistance, though progress was slow because the retreating enemy had mined the khor crossings and the narrow dry weather road to Gondar extensively, but it would have been much slower had it not been for the gallantry of young Bhagat which brought the award of the first Victoria Cross earned by an Indian commissioned officer in the Second World War. The citation reads as follows:

"During the pursuit of the enemy following the capture of Metemma on the night of 31st January, 1st February, 1941, 2Lt Bhagat was in command of a



section of a Field Company, Sappers and Miners, detailed to accompany the leading mobile troops (Bren Carriers) to clear the road and adjacent areas of mines. For a period of 4 days and over a distance of 55 miles, this officer led the column in the leading carrier. He detected and supervised the clearing of 15 minefields, working at high pressure from dawn to dusk. On two occasions his carrier was blown up, with casualties to others; and on a third occasion, when ambushed and under enemy fire, he carried straight on with the task. He refused relief when worn out with strain and fatigue (and with one ear-drum punctured by an explosion) on the grounds that he was now better qualified to continue his task to the end. His coolness over a period of 96 hours, and in persistence and gallantry not only in battle but throughout the long period during which the safety of the column and the speed at which it could advance were dependent on his personal efforts, were of the highest order."

A senior British Officer records that not until 3rd February did Bhagat relinquish his dangerous post, and then only on a peremptory order from the column commander who rightly decided that the young subaltern should be sent back for medical treatment. Compton Mackenzie writes in *Eastern Epic* "It was meet that the first VC should have been awarded to the Corps of Indian Engineers, for it may be asserted that some dozens of VCs were earned, not awarded, by them in Africa, Asia and Europe. It honoured not only the Royal Bombay but also the QVO Madras and the KGV Bengal Sappers and Miners." LNK Balakrishna and Spr Ananda Padalkar, who were alongside Bhagat throughout the raid were respectively awarded the IDSM and a Jangi Inam. Bhagat was evacuated to hospital and later convalescence in Khartoum. He returned to 21 Company early in March, in time for the final battle for Keren.

The small mobile column regained contact with the enemy at Wahni some twenty miles beyond Metemma and fought there a lively and successful engagement which was repeated twenty-five miles further on. Some hundreds of prisoners were taken. At last, over two hundred miles from his supply base at Gedaref, Brig Mayne looked down on Gondar but his transport and supply resources could not maintain operations further forward or even there, so the column turned back thus ending a very successful raid. Gondar was in fact the last Italian garrison to surrender in the campaign. (It held out until the Autumn of 1941 before being taken, as related at the end of this chapter).

18 Field Company and the Keren Gorge Railway - Feb 1941

The story of the long and desperate struggle in and around the Keren Gorge began on the night of February 3rd when 11 Brigade of 4 Div failed, in a gallant attempt, to capture and hold the dominant Mount Sanchil to the west of the road and railway. However the Cameron Highlanders managed to establish themselves on a ridge, below the summit, which now bears their name as does the railway tunnel below it. The following night the 3/14 Punjabis reached the crest of Brigs

Peak, above the ridge, and held it for a few hours but, under intense bombardment, had to withdraw. General Beresford-Pierse then sent his 5 Brigade against the features on the east side of the gorge but that attack failed too. On February 10th he attacked on both sides of the gorge simultaneously with 29 Brigade of 5 Div in reserve. Mount Sanchil and Brigs peak on the left were stormed but could not be held. Lt Penny of 4 Div Engrs, acting as a liaison officer with 4 (Bengal) Field Company, was wounded in action on Mount Sanchil. The assault on the right flank fared no better than that on the left. So with only Cameron ridge to show for much blood and sweat 4 Div had to await the arrival of the rest of 5 Div with its artillery and engineers. The enemy made good use of the respite, pouring in reinforcements and guns into their elaborate defences which covered a huge demolition road block they had created in the gorge.

The railway from Agordat skirted the heights west of the gorge and entered a tunnel under Cameron ridge. With the road in the bottom of the valley, through Hell Fire corner, in full view of enemy observation posts on the heights above, a communication and resupply route had to be developed along the railway line. East of Hammet station much of the line was not directly under enemy observation although it was exposed to unobserved mortar fire. The Italians had done much to deny the use of the line by blocking the tunnel and some of the cuttings on its approaches. They had taken up some rails and then derailed and overturned trucks/flats full of boulders and stone, making clearance work difficult, especially in the tunnel.

From February 8th sections of 18 Company were employed opening up the railway line route to Cameron ridge where 5 Brigade had relieved 11 Brigade. The Company HQ was in the Hammet station area, approximately three miles from the tunnel. Nos 1 and 3 Sections were first tasked to clear the cuttings of ten derailed trucks, while No 2 Section (Lt Carter) started the difficult work of clearing the west of the tunnel which was totally and chaotically blocked. The aim was to use the near end of the tunnel as a bomb and shell proof forward ammunition and supply point. The enemy still had command of the east end, but Carter relates that "other than the odd bullet ricocheting down the tunnel when working by night with electric lights (with a portable generator) we were not interfered with."

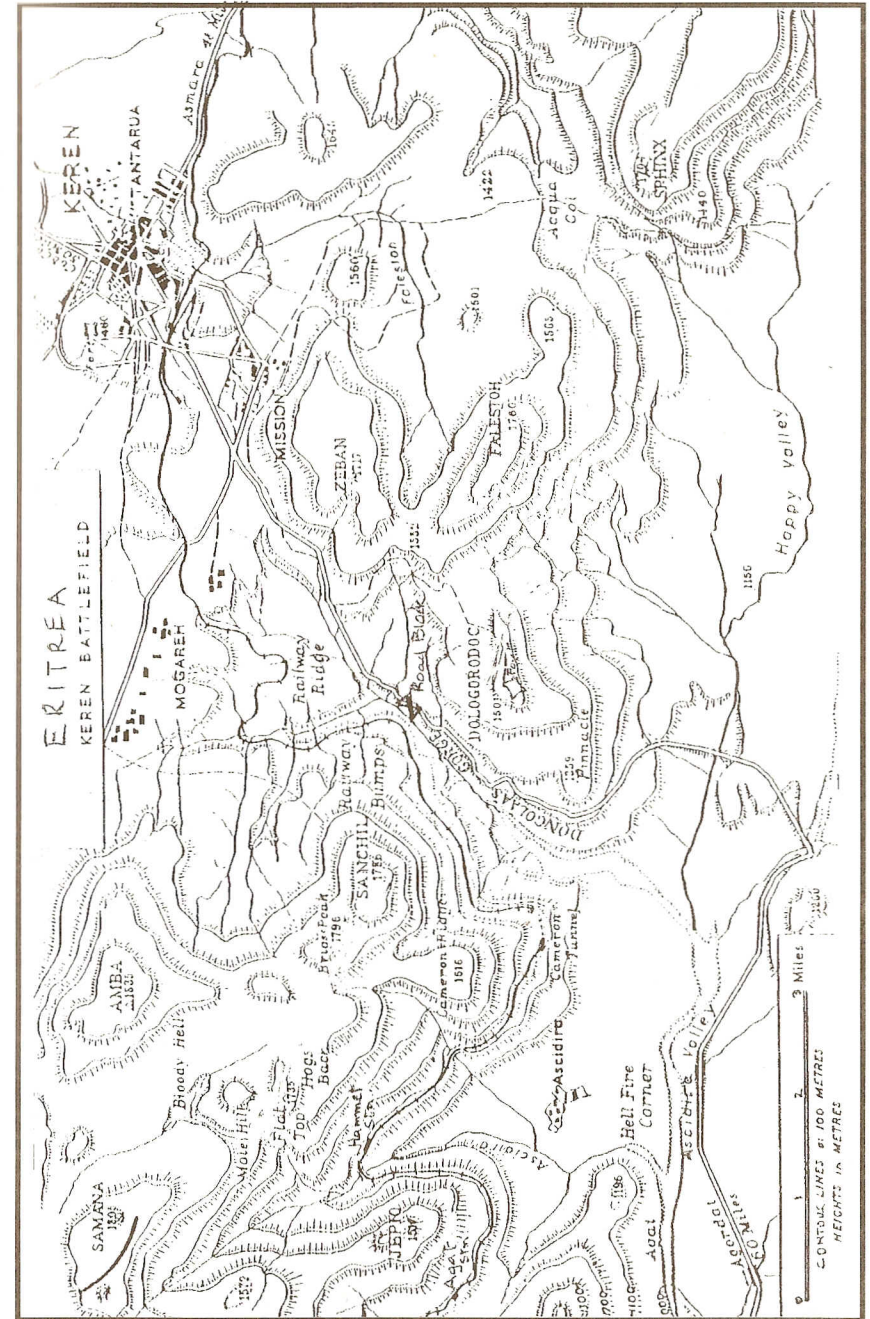
On February 12th the company headquarters was bombed and three sappers were wounded, in spite of having trenches with overhead cover. The day before a sapper was wounded by some gunners on a shooting expedition with service rifles. On 15th the repair of the railway track, with the construction of the coaligned road, up to the tunnel was completed and the first deliveries of water and of concertina wire were made to 5 Brigade units by 15cwt trucks the next day. No 3 Section was mainly tasked to run the supply route but rotated with the other sections working on the tunnel which was mainly the responsibility of No 2 Section. Lt Carter relates: "We worked in shifts around the clock, first to bring out the stone and tip over the edge outside the tunnel, and then to get the flats on

to a repaired set of rails and in adequate condition for subsequent use as there were no flats available on our side of the tunnel. Once the rail flats were recovered their brakes had to be repaired sufficiently to afford some degree of control in running them down the track to Hammet station, which was also the stores loading point. The last stretch of the line before reaching the station was over level ground so enough speed had to be worked up to be able to coast into the station, but too much speed could cause derailment about half way down where there was a bridge on a bend of the line. There was also the danger of the line being damaged by mortar fire, which was sporadic, and the danger of running into an Italian fighting patrol. The latter did happen once but rather half heartedly and there were no casualties or damage.

"Having got a flat to the station it was then loaded with ammunition and supplies, including water in metal tanks. It then became the job of one of our 15cwt lorries to pull it back up the line to the tunnel. Luckily the lorries straddled the rail gauge and with the help of gangs of local natives the spaces between the sleepers were filled to provide a road. On reaching the tunnel the flat was unhitched, the ammunition, supplies and water unloaded and the lorry backed up on to the flat for the free wheeling return to the station. Any wounded who were capable of facing the trip down were also loaded on the flat, some on stretchers. When there was a moon operations continued by night."

It seems that the bridge half-way between the station and the tunnel or that to the east of the station may have been damaged or there was a risk of damage from mortar fire. In order to insure that the route was kept open a SBG bridge was transported to the station. Between February 17th and 19th Nos 2 and 3 Sections of the company were given some refresher training on its construction as well as continuing other work on the route and in the tunnel in which No 1 Section was also engaged, together with water point duties. On the 20th water point supply times had to be reduced, due to pump overloading and well drying problems. With all that the company was doing it is surprising that an NCO cadre class was also started on the 20th but it does indicate that there was a shortage of junior NCOs for the many small, often independent, tasks which the company had to undertake.

February 20th was also the first resupply run using a railway flat. On the 21st a regular service, with a 15cwt truck towing two flats, was commenced by No 3 Section. However, the increased activity in the station area brought it under intense shell fire for twenty minutes. The company headquarters was moved to an alternative site but in the same area. The weakest link in the supply route was now from the railway up to Cameron ridge itself. So on the 24th and 25th Nos 1 and 2 Sections, with assistance from a section of 21 Company which had just arrived in the area, improved the mule track up the mountain. This work continued for No 1 Section on the 26th but the main event that day was the heavy shelling of Hammet station. A sapper was wounded and a winch lorry being converted for use on the railway was destroyed. On 27th and 28th the



station area was again shelled resulting in the company headquarters and base being moved back two and a half miles round the Jepio spur to Agat station.

HQ 4 Div Engrs was based with Div HQ three kilometres west of Acordat, but their diary records the CRE's frequent visits to 18 Company, sometimes staying overnight. This is not surprising as they were the only complete sapper unit in the front line for over a month. Although relatively static they were often under shell and mortar fire. Immediately after one of Lt Col Cavendish's early visits a number of anti tank mines were located either side of the rails just outside the tunnel in the unloading area. It was fortunate that the mines were not very sensitive as the CRE's vehicle must have passed over them.

Improvements and maintenance of a railway line and further clearance of the 500 yard long tunnel continued until the end of March. A small personnel flat was acquired and fitted with a motor bike engine (with a single chain drive) by the 4 Div Field Park Company, 6 (Bengal) Field Park Company. Carter writes that it was a popular vehicle so long as when going up the line it did not meet a flat coming down. It was given the name "stinker" but breakdowns, collisions, and derailments were prevalent. A diesel engine was, at a later stage, brought by road from Kassala but it was unreliable and was damaged in a collision.

20 and 21 Field Companies join the Keren Gorge battles

Leaving the Gallabat area in the care of the SDF, 9 Brigade and 21 Company joined the rest of 5 Div in the Agordat area in the latter half of February. Brig Mayne having left for Cairo and promotion, 9 Brigade was now under Col Messervy (from the disbanded Gazelle Force). After over a month of preparation the Kaid's assault up the Keren Gorge, with 4 Div on the left and 5 Div on the right, started on March 15th. 20 Company now under Bowring (promoted major on St. George's posting to Egypt) were put in close support to 9 Brigade for mine clearing. For this task the company had made 247 anti-personnel shields for themselves and the assaulting infantry. Bowring remembers when giving the eve of battle pep talk to his officers and VCOs, "how the latter reacted with wonderful enthusiasm."

The 4 Div March 15th attack on the heights above Cameron ridge met with limited success, but enough to give some supporting fire to 9 Brigade's attack on Fort Dologorodoc. By 0615 the fort had been taken by the West Yorkshires, but the success of any further advance depended upon whether they could hold it. This they did for several days under heavy bombardment and repeated counter-attacks.

On the 17th, 20 Company, with assistance from 21 and 2 (Bengal) Field Companies, built a mule track to the fort and picketed the lower slopes. For the next four nights 20 Company worked on the fort's defences; in particular building traverses which it totally lacked, for infantry protection especially during counter-

attacks. HQ 5 Div Engrs war diary records the delivery of corrugated iron sheets for this task. Moving it up to the fort must have been a nightmare as work and movement during daylight was impossible. On 19th one more effort was made to capture Mount Sanchil, on the left, by exploiting a gap in the defences which it was thought to exist to the west of it. For this 10 Brigade (still under Col Fletcher) was directed by HQ 4 Div. The aim of the operation was to neutralize Mount Sanchil so as to enable 29 Brigade to advance beyond Fort Dologorodoc, but the enemy was found in a strong position in the supposed gap. All three battalions suffered heavy casualties and the operation had to be aborted. Lt Col Tayler of 3/18 Garhwalis was killed and many of his officers were wounded.

The only remaining untried tactic was to make a thrust up the road in the centre but it was heavily obstructed, preventing tank movement. The block was about 200yds long and cleverly sited on a corner where the road entered the narrowest part of the gorge. A cliff had been blown down on to the road and the obstacle was well covered by fire from the enemy's excellent observation posts overlooking it. After the capture of Fort Dologorodoc, a close inspection of the block was carried out by Lt Selkirk of 2 (Bengal) Field Company on the night of the 16th. He reported that there were two 20yd craters in the road and between them and beyond them were lengths of massive debris including many large boulders and rocks. He estimated that a way for tracked vehicles might be opened in 48 hours. It would seem that at this stage overall command and control of operations in the Gorge was centralized under Maj Gen Heath's 5 Div HQ. On the following night (17th) the CRE (Lt Col Napier) made a personal reconnaissance with detachments of 2 and 20 Companies and with Indian infantry protection. He had arranged artillery and small arms fire support and had hoped to start clearance work that night but enemy fire was too heavy and our own not enough to reduce it. A further attempt was made on the next night (18th) but was held up by heavy small arms fire from an enemy picket beyond the block. After another failure on the next night (19th) under still heavier enemy fire from several directions, it was apparent that no progress could be made until some of the surrounding ground had been captured.

Maj Gen Heath decided, from his own observation, that the best way of doing this was by using the covered approach of the railway tunnel. To achieve this the heavily mauled 10 Brigade had to be reconditioned and more of the railway tunnel had to be unblocked by 18 Company. During this respite 20 and 21 Companies were, with infantry working parties, improving the mule tracks up the steep rocky gorge sides to the forward infantry positions. Dual carriageways were needed as in places mules could not pass each other and wounded men on stretchers were at risk of falling. On March 24th, 18 Company had cleared the tunnel sufficiently for two battalions of 10 Brigade (now commanded by Brig Rees) to break out from it that night. By 0530 on the 25th most of the objectives, where the enemy had overlooked the road block, had been taken - mainly by surprise. With our infantry established on the lower slopes of Mount Sanchil during the morning, the enemy were denied close observation of the road block.

This enabled 2 (Bengal) Field Company to start clearing the block by blasting a way through and toiling with picks, shovels and crow bars. Although not under enemy small arms fire, they were under enemy shell fire and mortar fire which inflicted casualties. As 20 Company were relieving 2 Company at 1830 a mortar shell killed several of the latter's sappers and their OC (Maj Platt) was badly wounded and evacuated. 20 Company were, in turn, relieved five hours later by 21 Company followed by 4 (Bengal) Field Company at 0430 on the 26th. At 0930 it was 2 Company's turn again, followed again by 20 Company at 1430 and 21 Company at 1930. By then a track fit for 'I' (Infantry) tanks was opened but as night was falling it was decided to use the hours of darkness to improve the track to a state in which wheeled vehicles could just get through.

At the same time as 29 Brigade's attack went in on Mount Zeban at 0430 on 27th, "Fletcher Force", a mobile column (under Colonel Fletcher) of Central Indian Horse (down to 14 'I' tanks), the brigade carrier platoons and No 3 Section 20 Company, started moving through the gorge, but was delayed by some of the leading carriers getting stuck. This problem was overcome by the CRE ordering officers to take over as drivers. The break through was achieved by 0800 and the 20 Company Section led the way, checking for mines, to Keren itself. HQ Engrs 5 Div arrived in the town at 1700 the same day. The other two sections of 20 Company, together with 21 Company, worked on improving the route through the gorge. They also set up a water point in Keren.

The gorge battle was one of the few occasions when the enemy fought with tenacity. They kept it up for 53 days and wore themselves out in eight fruitless attempts to retake Fort Dologorodoc. They left more than 3,000 dead on the rugged heights and, in effect, signed the death-warrant of their empire in North East Africa. It was noticeable that the last enemy troops to give up were invariably the Eritrean colonial soldiers who stuck it out after the Italians had fled. Victory for Gen Platt was almost complete but it was, like Waterloo, "a close run hard pounding" affair as the month long stock-piling of ammunition for the final battles was very nearly all spent.

For his example and actions during the gorge battles Hav Said Akbar of 20 Company was awarded the IDSM (gazetted 30th Dec 1941). The citation states: "During the night of 20/21 March when his section was employed on fortification of Fort Dologorlo under sporadic bombardment he gave a fine example to his men and was instrumental in producing a large output of work under difficult conditions.

"Again on the night of 25/26 March when his section was engaged on work on the road block in Keren gorge under heavy shell and mortar fire he showed exceptional drive, ability and fearlessness. His courageous conduct was an inspiration to those working under him."

18 Field Company return to Egypt - April 1941

The capture of Keren was the end of operations in Eritrea for most of 4 Div. They were already under orders to return to the Western Desert where Rommel was about to start his offensive which was to take him through Cyrenaica in early April. However, right up to March 29th, 18 Company were still clearing blockages in the Keren railway tunnels and were, on that day, unlucky to suffer nine casualties, including a havildar, while tamping a charge of Italian explosive. The next day they handed over their railway clearance work to 101 Railway Construction Company, which had at last caught up with them. On 30th they came under command 5 Brigade and moved back to Agordat and the next day to Kassala where they were again unlucky with an overturned lorry killing one sapper and injuring another. The company other rank strength had reduced from 262 at the end of January to 205 at the end of March. They shipped out of Port Sudan on April 9th and were back at Mersa Matruh on 13th, where they had been just four months previously. The news of Rommel's break through to the Egyptian border coincided with their arrival. HQ Engrs 4 Div actually went into Keren before withdrawing back to Port Sudan and Egypt about two weeks after 18 Company.

In recognition of 18 Company's achievements at Keren their OC, Maj Stuart, was appointed MBE. The citation, signed personally by Lt Gen Platt, states:-

"On arrival before Keren on 8 Feb 41, 18 (RB) Field Company., were given the work of clearing derailed railway wagons from a tunnel and a cutting on the line approaching our forward area. The clearance of this line made available a LofC not wholly under observation; this later became the only route. At the end of March when Keren was successfully assaulted, a service of railway wagons hauled up-hill for 15kms by 15cwt trucks, and of trollies and mules, maintained a 3.7 Howitzer battery, nine battalions and 300 mules. The operation of this improvised transport, by rail wagon was difficult, but there was no reasonable alternative. This and connected works on the railway line to the forward area was done by 18 (RB) Field Company, Maj NL Stuart, Commander. The line was shelled and cut; the original loading station, Hummet, was abandoned after first shelling. The completion of a heavy dumping programme, the daily maintenance of troops, the evacuation of the wounded, and finally the rapid removal of three more derailed wagons from Cameron tunnel prior to the 10 Ind Inf Brigade attack, were all successfully accomplished by 18 (RB) Field Company and reflect great credit on the leadership, resource and competence of their Commander."

Lt Col Cavendish was awarded the DSO for his leadership at Keren but, although the award was gazetted, the citation is missing from the Public Records.

The advance to Asmara - End March 1941

Fletcher Force, with a detachment from No 3 Section 20 Company, paused only for an hour in Keren before continuing in pursuit of the enemy towards Asmara. As no officer or VCO was available, the sapper support for Fletcher Force was led by Sgt Knights, the MT sergeant, for the first two days. His first order from Col Fletcher "Sgt Knights, develop the water" was not exactly in his trade specification but Knights, as Bowring confirms, was a good sapper. At Km59 (from Asmara) they were temporarily held up by demolitions and artillery fire. No 3 Section cleared a way for tracked vehicles to get through but they were held up again at Km56. 29 Brigade took over the advance next morning (29th) with Nos 1 and 3 Sections of 20 Company at work clearing the road of concrete blocks and steel barriers in 40yds of demolished hillside. By noon the sappers had worked so well that a column of armoured cars, headed by four tanks, was passed through the Km56 block which was fully cleared for wheels at 1915. The advance continued to Km51 where there was another block. During the day No 2 Section constructed and opened a water point back at Km64 which they handed over to 21 Company next day.

During 29th 10 Brigade had been ordered to outflank the enemy by advancing down the railway with a detachment of Skinners Horse, and probably a section of 21 Company, but the move was foiled by serious demolitions along the railway. Early on 30th work started on the extensive Km51 road block where 100yds of hillside formation had been destroyed. Three 'I' tanks were got through at 1500 but work continued all night and next day to make the route fit for wheels. Meanwhile on 30th another block was encountered at Km44, near Ad Teclesan, where the road descends to Asmara. Here the Italians made a last effort to stem the advance. The leading 'I' tanks were knocked out and 29 Brigade's attack on the enemy position failed. During the day of 31st, 20 Company had deployed for work to clear the road block but were held up by shell fire and a burning ammunition lorry. At 2030 they started work again on a very dark night and in a dust storm. By 0230 a route for 'I' tanks was established and at 0630 April 1st a 9 Brigade mobile column passed through, capturing the enemy positions.

It is likely that 2 (Bengal) Field Company and 21 Company, following behind 20 Company, improved the routes through the cleared blocks at Kms54 and 51 and on the railway. At Km44, they may have assisted during the final stages of getting the initial route through that major obstacle which was covered by enemy fire. 2 (Bengal) Company, with 9 Brigade, were certainly engaged in mine clearance further down the road as well as removing obstacles on the railway line. The companies also set up water points for their Brigades and the rest of 5 Div as they followed on down the road. The Engineer operations at Keren and Ad Teclesan were as stated by Sandes "typical of all Sapper and Miner units in which officers and men constantly risked death or disablement as they formed the spearhead of every advance, and yet, unlike other arms, were seldom able to retaliate. No duty could demand greater courage."

On April 1st, the same day as Ad Teclesan was captured, Asmara, the Eritrean capital, was declared an open town. Next day it was entered ceremonially by the Highland Light Infantry led by their pipers. Large crowds of Italians and Eritreans lined the streets but they commented that the British must have been hard pressed if they could not afford a proper band! However the population was most affable to the troops of the division and in typical Italian manner appeared to bear no malice towards their conquerors, treating them like welcome tourists with money to spend.... On the night of the entry into the town the garrison mess president ordered a special dinner to be prepared for Maj Gen Heath and his staff. The menu cards were headed "5th Indian Division Celebration Dinner". The Italian manager of the Albergo Ciano, who had spent seven years as a waiter in fashionable London hotels, thoroughly entered into the spirit of the occasion.

Thousands of Italian soldiers laid down their arms at Asmara. Vast quantities of equipment were captured in addition to 1.5 million shells and masses of small arms ammunition. The Italian Army in North East Africa was broken; only a few elements escaped southwards to help the Duke of Aosta muster the remnants at Amba Alagi. The other part of the Commonwealth pincer movement, Lt Gen Cunningham's operations from Kenya and Somaliland, had also been highly successful and on April 1st were close to Addis Ababa, the Abyssinian capital. It was entered on 6th, the Italian remnants fleeing northwards to Amba Alagi to join the Duke of Aosta and those fleeing from Eritrea.

The capture of Massawa - Early April 1941

Under direct orders from Mussolini the admiral in command at the Red Sea port of Massawa did not capitulate when Asmara was surrendered, so an operation to capture it was necessary. On April 4th, 10 Brigade, with 21 Company, started the 60 mile, 7,000 feet descent, through the Nefasit Gorge, to the sea. 21 Company was soon hard at work clearing the winding road of obstructions. One was 700yds long where a cliff retaining wall had been blown away. The meandering railway line had also to be cleared and mines removed.

During the hold up at Keren, 7 Brigade of 4 Div with 12 (Madras) Field Company had conducted an independent operation down the Red Sea coast. They arrived in the Massawa area about the same time as 10 Brigade. Attached to 7 Brigade was a Free French Foreign Legion unit who helped 21 Company unblock the road down to the port, particularly in the Nefasit Gorge. As the obstacles were not covered by fire their clearance was not very difficult. In fact one block was cleared by the Italian demolition party who had just made it. They had been captured by the Free French and were set to work, forcibly, under a legionnaire armed with a stick. He described their efforts as "Merveilleux, magnifique!". The road was not mined, though on the outskirts of the town a great variety of improvised mines were discovered. Many were canisters filled with explosive or shells, or both, and there were sea mines prepared for burying on land.

At 0400 on 8th April, 10 Brigade mounted a deliberate attack on the Massawa defences, which were held by 10,000 men, but little resistance was offered. The town and the harbour, full of scuttled ships, surrendered to 10 Brigade at noon without the need of any support from 7 Brigade who, after helping to clear the port, embarked as speedily as possible to join the rest of 4 Div already on their way back to Egypt.

While the Massawa operation was in progress, HQ Engrs 5 Div remained in Asmara and stayed there for the rest of the month. 20 Company, remaining with 29 Brigade, were in the Ad Teclesan area further improving the routes where there had been obstacles. Some were closed each evening to allow work to be done on them. The company also built POW cages and set up and operated water points. Later they moved to Asmara, which is on a 7,000 feet plateau, and spent nearly two weeks billeted in an Italian farm. This provided a cool, rural and quiet retreat to recover from their exertions. They did some training, including field firing, and also reconnoitred sites for water points on the routes to the south from Asmara.

Southwards to Amba Alagi - April to May 1941

To cut off as many as possible of the enemy fleeing southwards, Col Fletcher's "Flitforce", comprising the Central Indian Horse (CIH) and two of the MMG Companies of the SDF, was dispatched south the same night as Asmara was entered. The SDF companies took the road to Aduwa, which they had tried to approach from Aicota in February, while the CIH followed the Addis Ababa main road to Adigrat. Both destinations were about 100 miles from Asmara. At Adi Ugri, 50 miles down the Aduwa road, the SDF column released some allied prisoners, taken when Italy invaded Somaliland. The former prisoners had the pleasure of escorting their former guards back to Asmara. Some miles further south the SDF came upon an Italian detention barracks. Capturing the staff would have meant looking after the prisoners, so the Italians were left in charge on condition they did not interfere with traffic on the road which the SDF were leaving behind. Fletcher, in agreeing to this, commented "Such a course would not have been possible with any enemy other than the Italians". Aduwa was reached at 0900 the next morning (April 2nd). One of the SDF companies was then sent east across the Alequa Pass to Adigrat to link up with the CIH.

However, the CIH had been held up by a fair-sized Italian force a few miles north of Adigrat. The SDF company, meeting no opposition on their road, entered the town and captured a complete colonial battalion already in their lorries and about to set off southwards. The Italian force facing the CIH, on hearing by radio that Adigrat had been entered, also surrendered. It was estimated that the total Italian forces in the Adigrat area out-numbered Flitforce by ten to one.

The CIH force quickly moved on another 80 miles south to Quiha where they could have been stopped by a few determined men, but the Italian garrison

offered the CIH advanced guard subaltern a conditional surrender. The terms were that Colonel Fletcher and the CO of the CIH should have lunch with the Garrison Commander! Fletcher instructed the subaltern to agree the terms provided that during lunch the Italian lorries should be turned round to head north and be loaded with the 300 Italian and 700 Colonial troops. This was done but a complication arose regarding the rank of the junior officer who was to escort the Garrison Commander into captivity. Honour was however satisfied when it was explained that the junior officer belonged to a very distinguished English family! Shortly after this and after taking the market town of Macalle, the CIH were withdrawn to rejoin 4 Div on its way to Egypt. They were replaced by Skinners Horse. A change of command of 5 Div also took place on April 12th Maj Gen Mayne returned to the Div to take over from Maj Gen Heath who was promoted to command a Corps in Malaya.

5 Div HQ Engrs war diary records, during April, that 21 Company was sent on 11th, after the Massawa operation, to Aduwa to be under command Flitforce (presumably the SDF element). On 16th the company was in Selaccaca and on 28th they were in Adigrat. A section of 20 Company arrived in Quiha on 19th, followed by the rest of the company on 22nd, ahead of 2 Company. 20 Company then advanced south with Skinners Horse to Mai Mescic, the divisional concentration area for the Amba Alagi operations. A water point was also established there on 26th.

Amba Alagi operations - End April to Mid May 1941

The first sight of Amba Alagi fortress was daunting. Shaped like a cone and rising to 11,000 feet, it was the highest mountain encountered during the campaign. The surrounding features were higher than any of those at Keren and just as steep. The 235 mile line of communication back to Asmara imposed a heavy logistical burden which required Maj Gen Mayne to reduce his force up front to the minimum, but he was anyway required by Lt Gen Platt to leave behind, in Asmara and Massawa, HQ 10 Brigade, its three infantry battalions, plus a fourth from 9 Brigade. However, all the divisional sappers were needed for the main operations. The truck head for ammunition and supplies was 3,000 feet below and six miles from where the troops would have to make their final attack. As Brett-James, in *Ball of Fire*, wrote "The tasks awaiting the sappers were innumerable". There was much rain and it was cold at night in the mountains. 20 Company made good use of their vehicle canopies for protection against the weather and they enjoyed "pulling the legs" of their friendly rivals, 2 (Bengal) Company who had stripped their vehicles, back in the balmy days in the Sudan, to give a better appearance of fighting efficiency!

On April 25th 20 Company in direct support of 29 Brigade started work, under enemy fire, on making a track up Sandy Ridge, a right flanking approach to Amba Alagi fortress. Between 26th and 30th the company war diary shows its sections working in rotation on the track which, as at Keren, was doubled for

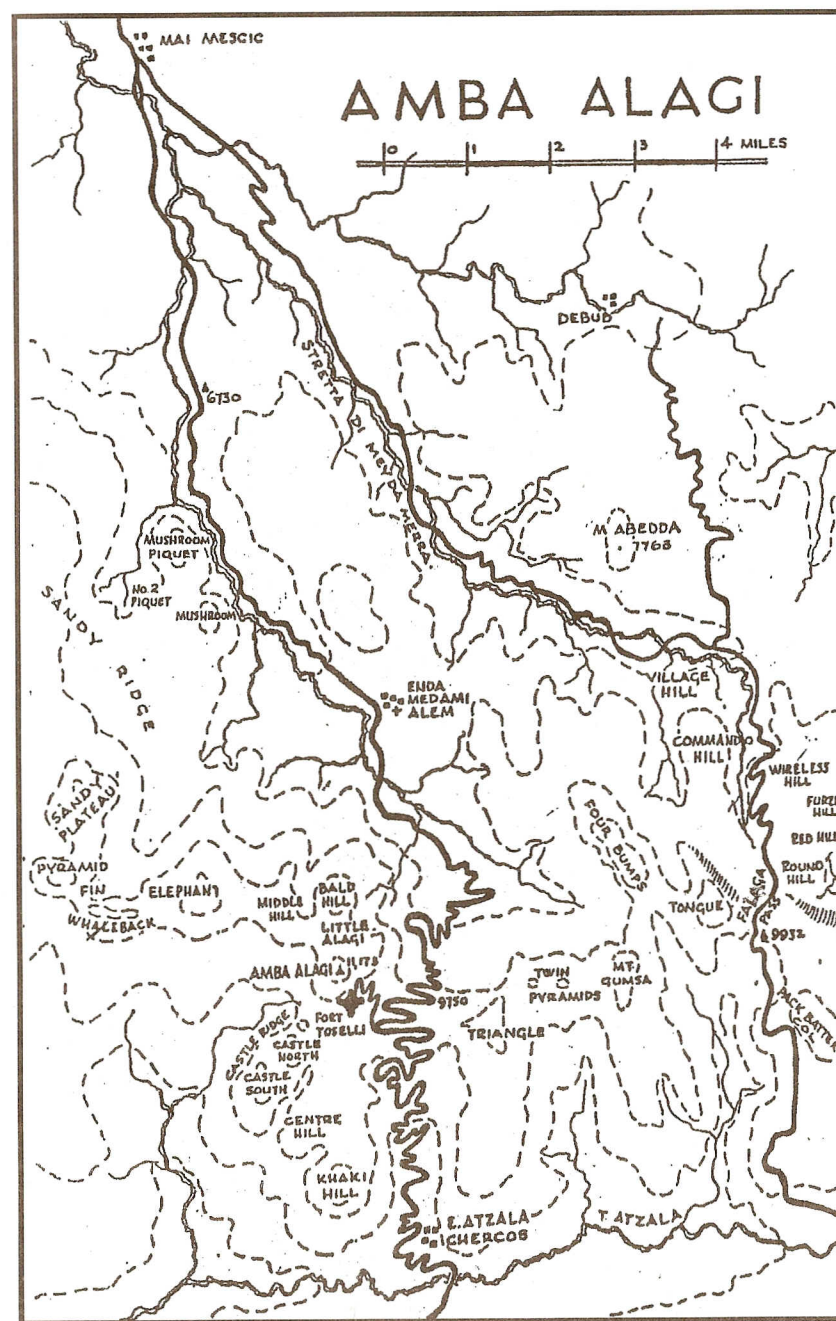
porter and animal movement in both directions. There were no mules available, so the country was scoured for donkeys. Between eight and nine hundred were collected but only 300 saddles, captured in Asmara, were available so units had to improvise. On the night of 30th the section working on the track were continually shelled and after working all day on May 1st they were again under shell fire in the evening.

Before this, on the night of 29th, the Mahratta Section of the company started clearing a major demolition of large boulders and 17 wheel-less and overturned lorries in the gorge road. There was well registered sporadic harassing artillery fire, on the road block, from Amba Alagi but the flashes could be seen by a sentry, who gave enough time for the section to take cover before the arrival of the shell - hence few casualties. Work continued on the nights of 30th and May 1st. That night, returning from a reconnaissance for enemy mines, the OC Maj Bowring suffered severe leg wounds from a shell which neither he nor the two sappers with him had heard coming.

He writes "After being hit I took cover in a culvert where Lt Peter Mills reported progress at intervals. He had quite a job as the lorries forming the block had to be jacked up, wheels fitted, and towed away, the work being constantly interrupted by shell fire." Nevertheless a passage for wheels, negotiable by 25pdr guns, was opened through the road block at 0330 the next morning. Bowring and the two sappers were casualty evacuated by an ambulance which had been in attendance during the task, "not expecting to be a customer myself". He also writes that although very young and inexperienced Peter Mills "was very plucky all through the campaign and respected by his Mahratta section". He was recommended for an MC but it was not gazetted.

Capt Miles took over as acting company commander with Lt Selkirk taking over from him as 2IC. Maj Bowring's leg injuries were so severe that he had to be evacuated to hospital in South Africa where he recovered and returned to India to fight in Burma later in the war. In retrospect Bowring regarded "the Eritrean Campaign as the last of the Gentlemen's Wars. I had my own 15cwt truck, an orderly, a bearer (batman), a shot gun, a sporting rifle, a radio, a gramophone, and cases of whisky and lime juice. And there was no dive bombing or poisoned wells. It was largely a contest against distance and geography, with only one serious battle with heavy casualties. Very different from the austere conditions later on." The Italians also liked the idea of a Gentlemen's War but their pastimes and tastes were more urbane and sophisticated - but less healthy and less successful.

On May 3rd 29 Brigade advanced further up the valley road with 20 Company in support. More road blocks were encountered, and cleared, on 4th. Between 5th and 9th the company reconnoitred and constructed donkey tracks to the three mountain features above Sandy ridge. On the 12th the company was placed directly under command 29 Brigade with the intended task of constructing a track towards the features on the ridge to the south of Amba Alagi, to link up



with 1st South African Brigade attacking the fortress from that direction. For the next two days, in preparation for this thrust, the company realigned the top of the Sandy ridge track and built some observation posts to cover the route forward towards the South Africans.

Although the first main attack on Amba Alagi was made by 29 Brigade, there were two 5 Div diversionary attacks with limited objectives. In the centre, alongside the totally blocked main road through the Toselli pass to Addis Ababa, a weakened 9 Brigade advanced on the western end of the ridge which led eastward from the fortress. It was probably supported by a section of 2 (Bengal) Company. On the division's left flank a new "Fletcher Force" comprising Skinners Horse, 51 Middle East Commando, a company of infantry and a section of 2 Company advanced up a rough road in the next valley to the east, leading to the Falaga pass where the road was found to end. The features to the west of it connected with 9 Brigade's objectives on the same ridge. Limited gains, against strong enemy positions, were made and held by both these subsidiary attacks. On May 8th, with the enemy withdrawing troops from this flank to resist 29 Brigade's attack on the west flank, there was a good chance of breaking through. For this purpose Fletcher Force was combined with a reconstituted 9 Brigade under Fletcher who was promoted to Brigadier in place of Messervy, who had also been promoted to command 4 Div, now in the Western Desert.

By May 14th the main features between the Falaga and Toselli passes, except for the Triangle (next to the Toselli), were captured. J (SA) Brigade had also advanced up the southern ridge features leading to Amba Alagi and had attacked the Triangle but had been partially driven back. With support from 9 Brigade the South Africans attacked again on 15th. Brett-James in *Ball of Fire* writes that at 0300 20 Company, armed with Bangalore torpedoes, successfully blew lanes in two rows of barbed wire between Pyramid West and Triangle. However, the company's war diary for May 15th only records track maintenance and a rehearsal for a Bangalore torpedo assault on the wire protecting the enemy on Little Alagi. (It may be that the Triangle breach was created by 2 Company.) Anyhow, the Italians, leaving their wounded and much booty behind, bolted into their main fortress. The 'Scottish' from the Transvaal and the 'Highlanders' from Garhwal arrived at the top of the Triangle, from opposite directions, at about the same time. The latter were surprised to be hailed by the Transvaal Scottish in their little known language. Lt Col Hartshorne, who had lost an arm at Gallipoli, had, after World War I, served for some years with the Royal Garhwal Rifles before retiring from the Indian Army to South Africa.

Viceregal capitulation at Amba Alagi - May 16th 1941

The enemy was now hemmed in on all sides but it was estimated that a frontal assault by all three brigades would cost many casualties. However, suddenly and unexpectedly, the Italians capitulated at 0730 on May 16th. The reason, given later by HRH Duke of Aosta to Maj Gen Mayne, was that during the

previous night Allied shell fire had struck a POL dump high up on the slopes of the fortress and petrol and oil had flowed down into the Italians' last remaining source of drinking water. (One of the terms of surrender was that access to fresh water should be provided.) A truce was first arranged for a meeting of envoys but had to be delayed as the Italian general was murdered on the way by free-lance undisciplined Abyssinians in quest of loot. During the next twenty-four hours of surrender negotiations there was much fighting between the Italians, in their forward defences, and the Abyssinian would-be looters. These self-styled patriots had not infrequently been unhelpful in their uncoordinated activities and had, when feasible, been physically barred from taking part in critical operations. On one occasion a subaltern of 20 Company had to order his section to return their fire so as to defend themselves.

One of the two main Italian concerns in the surrender negotiations was that they should be protected from the Abyssinian terrorists. Their other concern was that they should be allowed to "Surrender with Honour". This was eventually agreed by allowing them to march out of their fortress in ceremonial formation, handing over their weapons a couple of miles down below the battlefield, on condition that the fortress was left clear of booby traps and that all weapons and equipment were handed over intact as "A matter of honour". Maj Gen Mayne's envoys spent the night before the formal surrender with the Duke's generals and staff who were drinking up their remaining stocks of wine. All the officers were pleased about the surrender and their manner most cordial. Gramophone records were played during the evening including the Italian and British National Anthems! On May 19th the defeated remnant of the Italian army marched out of Amba Alagi down the hill past a guard of honour drawn from regiments of 5 Div with the pipe band of 1st Transvaal Scottish playing *The Flowers of the Forest*. Over 4,000 Italians and nearly 500 Colonials marched out into captivity and away by lorries to Quiha over the next few days but 1,200 were kept to help the sappers clear the road blocks and salvage quantities of equipment. HRH Duke of Aosta, as Viceroy of Abyssinia, came down separately the next day (20th) from the fortress, where he had lived in simple quarters. He walked down with Brig Marriot to Maj Gen Mayne where he was invited to inspect a "Guard of Honour" before being driven away to Quiha where he was met by the Kaid (Lt Gen Platt). He was then taken to Khartoum and later to Kenya where he died from tuberculosis within a year. Although a royal prince, he had been a ranker gunner in the 1914-18 war and had lived after that for a time in England with interests in polo and flying. He returned, in the 1930's to the Italian Army and was later head of the Air Force before his viceregal appointment in 1937.

It would seem from the available records that 21 Company was mainly employed in the LofC and divisional forward base area throughout the Amba Alagi operations. HQ Engrs war diary reports that the company moved into Mai Mescic on May 8th and that it, or its main elements, did not reach Enda Medami Alem, 9 Brigade's base, until 18th. HQ Engrs followed them there on 22nd.

5 Div concluding Operations May to June 1941

Clearing up the Amba Alagi and Toselli Fortresses was a major task. The mountains were honeycombed with large underground bunkers, tunnels and gun positions, many in a collapsed condition and filthy dirty. Little attention had been given to sanitation. Down the many hairpin bends of the Toselli Pass were abandoned vehicles in their scores, as well as road demolitions in the defiles. Between May 18th and 23rd 20 Company (less one section) with help from 1 (SA) Field Company supervised many of the 1,200 Italians kept back to help clear the road blocks and the battlefield.

On May 19th one section of 20 Company accompanied Skinners Horse southwards down the road to Dessie to secure the route joining up with the South Africans. The route runs close to Magdala where 73 years earlier (April 1868) all five then existing RBS&M Field Companies (including the predecessor 18, 20 and 21 Companies) made breaches in that fortress which brought to a victorious end an earlier British Indian (Bombay) Army campaign. That army was commanded by a former Royal Engineer Lt Gen Sir Robert Napier (not an ancestor of the CRE 5 Div) who later became Commander in Chief India, a Field Marshal and Lord Napier of Magdala.

Sapper work continued throughout the end of May and most of June, improving the roads, providing water and improving conditions in the camps. Maj Winchester took over command of 20 Company on June 10th. Capt Miles reverting to 2IC. From late May the division began withdrawing back towards Massawa. On June 6th HQ Engrs and 21 Company were in Asmara. They shipped from Massawa three weeks later with other elements of the division, reaching Suez on 29th. However, 20 Company remained with 29 Brigade for another three weeks. The company were based at Senafe (in the Adigrat area) until July 15th when they too moved to Massawa to embark, reaching Suez on 22nd. Maj Winchester had, during the waiting period, taken the opportunity to do some company training and "the workshops were in full swing".

Final Operations in Abyssinia

When 5 Div (less four battalions in Asmara) became fully stretched during the Amba Alagi operations, General Platt relieved General Mayne by taking under his direct control the separate thrust south westward from Asowa, which had originally been part of Flitforce. Miralai (Colonel) Deane's SDF MMG Group made rapid progress for about 100 miles to the escarpment south of Adi Arka. Here, guarding the approaches to the Gondar plateau, they were held up by a determined enemy in a very strong position. Without at least an infantry battalion, any assault on it was impossible. As the Kaid's resources were fully stretched he could not immediately provide a fighting reinforcement. However, from recent experiences, there was a possibility that the enemy would give up if they could be persuaded that Colonel Deane had been reinforced with an infantry

battalion. Accordingly he was sent three Scottish pipers who performed, out of sight close under the escarpment, morning and evening. But the ruse failed as these last defending Italians were made of sterner stuff. Next to try, after the fall of Amba Alagi, was 51 Middle East Commando, comprised of Jews and Arabs and other nationalities, but they lacked numbers and fire support. Later still a British battalion, who had been unfortunate in the early operations of the campaign, was given a chance to achieve success. They were to attack by first making a wide flanking movement. For this they were guided by "Shufflis" who were local Abyssinians recruited by political agents and paid, in the field, with the large and distinctive Marie Therese solid silver dollars. However the guides enlisted for this operation must also have been in the pay of the enemy as, after guiding the battalion on the long approach march, they turned on the battalion's Orders Group (for the attack itself), murdering the CO and the company commanders. The battalion could not continue and the operation had to be aborted. By August no progress had been made and the SDF MMG units were withdrawn as they were needed for long range operations in the southern Libyan Desert, based in W Sudan. It was then left to the S Africans to take Gondar and complete the Abyssinian campaign. Although not a RB Sapper unit, 8 (Bengal) Army Troops Company which was still in Eritrea, must be mentioned as they provided, with 1 (SA) Field Company, the sapper forward support and other engineering assistance for these final operations. So the campaign ended in the region of 9 Brigade's original operation along the Gallabat-Gondar road where, nine months earlier, the RBS&M VC action had taken place.

Campaign Postscript

In June, before 5 Div started to leave for Egypt, General Wavell held a victory parade in Asmara. Also, in a separate ceremony in what had been the Viceroy's residence, two 2Lts were awarded their medal ribbons. The DSO to 2Lt Cochrane and the VC to 2Lt Bhagat who, as noted in his biography, was proudly wearing, on his right shoulder, the royal blue lanyard of the RBS&M. The other Indian engineer groups wore a khaki lanyard on the left shoulder until after the war when the title Royal was conferred on the Indian Engineers as a whole. The Victoria Cross itself was presented to Bhagat at a ceremony in New Dehli early in November 1941 in the forecourt of the Viceroy's House. It was bestowed by the Viceroy himself in the presence of General Wavell, then CinC India, and a large gathering of military and civil officers. Lt Col HE Horsfield, commandant of the RBS&M, conducted Lt Bhagat to the dais, and an official account of the action for which the VC was awarded was read in English and Urdu. This was a great day for the Corps of Indian Engineers, and particularly for the Bombay Group of the Indian Sappers and Miners. Lt Baghat (later Lt Gen PS Baghat PVSM VC) was CRE 4 Ind Div at the time of partition in 1947. In 1948 he was appointed Commandant RBS&M Centre, Kirkee.

Other awards to RBS&M during the campaign included the DSO to Lt Col Cavendish, CRE 4 Div, the MBE to Maj Stuart, the MC to Maj Bowring, OC 20

Company, the IDSM to Hav Said Akbar, of 20 Company and to LNK Balkrishna Yerundkar of 21 Company, the MM to Khem Singh of 21 Company, and a Jangi Inam to Ananda Padalkar, also of 21 Company. Twenty officers and other ranks were Mentioned in Dispatches.

Although Bowring's MC was gazetted (LG 16.4.1942) the citation is not held by the Public Record Office in London. Nor are the citations for Lt Col Cavendish's DSO (LG 30.12.1941), LNK Balkrishna Yerundkar's IDSM and Nk Kem Singh's MM.

NOMINAL ROLL OF THOSE KNOWN TO HAVE SERVED WITH RBS&M UNITS

HQRE 4th Indian Division (Jan - April 1941)

CRE	Lt Col HP Cavendish DSO OBE*
Adjutants	Capt IB Taylor to mid-Feb 1941
	Capt L Mac T Beattie from mid- Feb 1941
Field Engineer	Capt O Garrett AIRO
Subalterns	Lt JA Creamer AIRO, 2Lt Penny (wounded in action 12 Feb)

18 Field Company (Jan - April 1941)

OC	Maj NL Stuart MBE*
2IC	Capt JPA Jackson
Subalterns	Lts W Kitchen and BAA Plummer*
	2Lts CC Fraser and WG Carter
Subedar	Rehmat Khan IOM* (from 20 Fd Coy Feb 1941)
Jemadar	Maruti Ghorpade
BNCOs	MT Sgt Williams and Wksp Sgt Willcocks

HQRE 5th Indian Division (May 1940 - June 1941)

CREs	Lt Col Reid (to late Sept 1940)
	Maj HE St George (acting Sep 23 - Nov 11)
	Lt Col AHG Napier (from Nov 11)
Adjutants	Capt JC Winchester (from Nov 11)
	Lt PP Miles IARO (acting Sept - Dec 4)
	Capt WHD Wakely (from Dec 4)
Fd Engr	Capt EH Edney IARO
SDF Liaison	Bimbashi Telford SDF
Subalterns	Lt R Heard-Craig IARO
	2Lts: JH Partridge, Lyon, Skinner, and EA Grove

20 Field Company (Aug 1940 - June 1941)

OCs	Maj HEG St George (acting Sep 23 and from Nov 11 40 - Feb 4 41)
	Capt/Maj JHS Bowring MC (Sep 23-Nov 11 40 and Feb 4 -May 1 41)
	Capt PP Miles IARO* (May 1 - June 10 1941)
	Maj JC Winchester (from June 10 1941)
2ICs	Capt JHS Bowring (to Sep 23 and from Nov 11 1940 - Feb 1941)
	Capt PP Miles IARO* (Feb 4 - May 1 1941)
	Capt A Selkirk (from 2 Fd Coy May 1 1941)
Sec Officers	Lt PP Miles (to Sep 23 and from Dec 4 1940 - Feb 4 1941)
	Lts HM Boardman and PCM Mills
	2Lts Abbot and Skinner
Subedars	Rehmat Khan IOM* (to 18 Fd Coy Feb 1941)
	Doulu Chogle* (from Feb 1941)
Jemadars	Moh'd Hussain, Sekhawat Hussain Shah*, Lachman Singh*, and Babu Singh, replaced by Antar Singh
BNCOs	Wksp, S/Sgt FH Pellatt* and MT, Sgt Knights
Havildar	Said Akbar IDSM, and L/Hav Peer Shah
Sapper	Thakar Singh*

21 Field Company (Aug 1940 - June 1941)

The only nominal roll available is one for early July 1941, just after the company had arrived at Suez from Eritrea. It is assumed that all had served in the campaign, if only, in some cases, in the later stages

OCs	Maj GEH Philbrick (from Aug 1940 - ?)
	Maj RWW How (probably from April 1941)
2IC	Capt S Houghton IARO
Subalterns	Lt HB Paterson (mortally wounded in action Nov 1940)
	2Lts PS Bhagat VC IE*, FJN Forbes, and PM Head
Subedar	Moh'd Hassan
Jemadars	Ananda Jagtap*, Mangal Singh*, Moh'd Malik*, Jagat Singh, Arjun Sakpal and Rama Nand (Medical Corps)
Naiks	Khem Singh MM, and Manjarc
LNaik	Balkrishna Yerundkar IDSM
Sapper	Ananda Padalkar (awarded Jungi Inam)

* Denotes Mention in Dispatches - probably awarded during campaign

CHAPTER SIX THE SYRIAN CAMPAIGN

JUNE TO JULY 1941

18 (RB) Field Company

Compiled by Brigadier DA Barker-Wyatt CBE

18 Field Company was the only British or Indian combat engineer unit to take a major part in the short but intense Syrian campaign of 1941. The company not only provided all the forward engineer support for the 5th Indian Infantry Brigade and the Free French forces on the Damascus front, but also fought as infantry in several of the bitter battles both in attack and defence.

The primary sources for the following overall account of the campaign, in particular 5 Indian Infantry Brigade's vital part in it, are taken from Lt Col GR Stevens's OBE *History of the "Fourth Indian Division"* and Anthony Mockler's *"Our Enemies the French"*. The details of 18 Company's activities were mainly gleaned from their war diary.

The Move to Trans-Jordan and the Invasion Plan

While HQ 4 Ind Div and 11 Indian Infantry Brigade were engaged in Operation "Battleaxe" in the Western Desert, 5 Indian Infantry Brigade with 18 Company were fighting the Vichy French forces in Syria. To forestall the imminent likely Vichy French hand over of Syria and Lebanon to the Germans, General Wavell was forced to invade in spite of his inadequate and very stretched resources. Although a staff assessment estimated that three complete divisions, including one armoured, to be the minimum effective invasion force, Wavell could only, with difficulty, provide the equivalent of two divisions; 7 Australian Div, 5 Ind Infantry Brigade and the equivalent of two infantry brigades of Free French forces without supporting arms. The Force in total was appreciably less than the Vichy French Army of the Levant. The invasion plan was for the Australian Division to advance into Lebanon along the coast and through the Bekaa plain while 5 Brigade and the Free French forces made for Damascus from the Jordan valley and from Trans-Jordan astride the Hejaz railway and the Deraa-Damascus main road.

18 Company (Maj NL Stuart) left Bagush in the Western Desert on May 16. Staying for four days in the Canal Zone they somehow managed to start an NCO's cadre class and do some other training before moving to Irbid in Trans-Jordan, which they reached on May 24 having deployed 1 Section to the Jordan valley. Presumably to try to bluff the Vichy French into thinking that an advance

into Syria was not imminent 18 Company were for the next two weeks mainly preparing defences, carrying out reconnaissance for demolition schemes along the Syrian frontier and, inevitably, setting up water points for the brigade and also Free French units. A khamsin was blowing hard during much of that period. Dust storms and rapid changes of temperature between day and night made conditions appalling for sapper work and for the MT.

Brig WL Lloyd's plan for 5 Brigade was a three-pronged attack. Two columns were directed on Deraa in the open desert while the third secured Kuneitra on the south eastern side of the Golan Heights and on the relatively inferior road to Damascus. The Kuneitra bound force comprised 1 Royal Fusiliers with Australian gunners and 1 Section 18 Company in support. For the attack on Deraa 4/6 Raj Rif with an anti-tank gun detachment and 3 Section 18 Company were tasked to isolate the town from the north while 3/1 Punjab Regiment (Punjabis) and 18 Company (less two Sections) were to attack the town from the south with 1 Field Regiment RA in support. The day before the attack 3 Section (2Lt Cox) joined 4/6 Raj Rif in Mafrak. On the way they improved the track to Rumta. Next day was spent on vehicle maintenance and resting.

5 Infantry Brigade's Attack and Advance

The campaign started at 2100 on the night of June 7/8 when C Company of 4/6 Raj Rif, with one NCO and six sappers of 18 Company in support, seized the enemy guarded railway viaduct over the Wadi Meidane at Tell Shehab on the Syrian frontier. Although prepared for demolition, it was captured intact, the sapper detachment removing the charges. Thus its destruction was once again thwarted, just as it had been twenty-four years earlier when Lawrence of Arabia failed in his attempt to demolish it in his clandestine operations to cut what were then Turkish communications. There is no doubt that 18 Company can claim some of the credit as the Raj Rif company commander recommended that Sprs Pritam Singh and Rakha Singh should be mentioned in Dispatches (later Gazetted) for their actions, under extreme conditions, during the night. The 18 Company war diarist also records that Sps Raunak Singh and Chambeil Singh were praised for showing "independent thought".

The rest of the 4/6 Raj Rif raced 45 miles westward during the night and surprisingly captured a Vichy French post and 140 prisoners. It could have been more, as a train load of troops from Deraa slipped through before the railway could be cut. The column then turned and approached Deraa from the north as it was becoming light on June 8. During this phase, on the orders of the column commander, 3 Section 18 Company seized a small hill which was a potential threat. The section used infantry type fire-and-movement battle drills to take the hill. After this action the section became the column rear guard behind the battalion HQ. The section's compressor tank was hit by an A/Tk Gun but without serious damage.

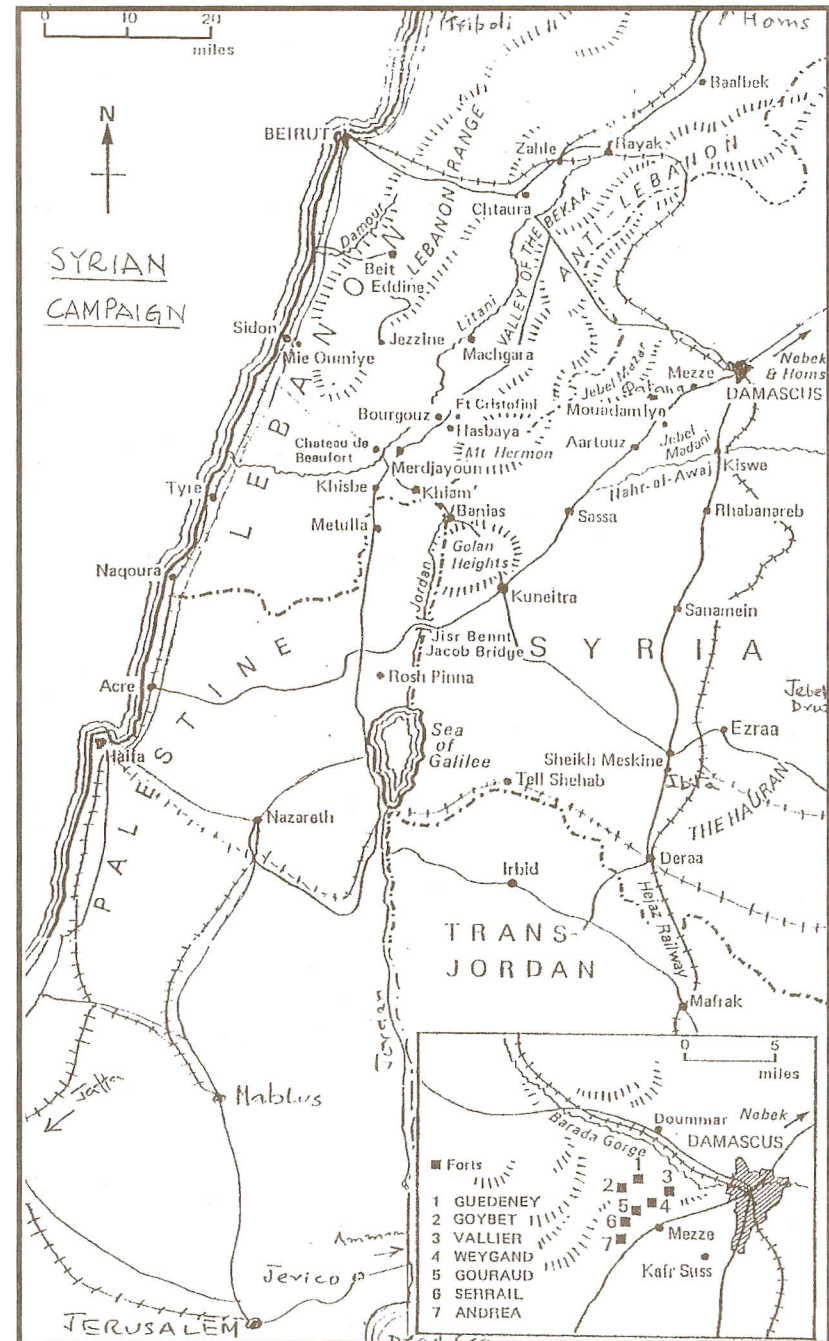
The Brigade's main thrust, with 3/1 Punjabis, directly from the south, was near Deraa at 0530 and, after a call on the garrison to surrender had been rejected, the gunners opened fire on the town. By 0830 its investment, by the Raj Rif from the north and the Punjabis from the south, was complete but as the attack closed in part of the Vichy French garrison escaped to the east. Nevertheless 300 prisoners were captured.

4/6 Raj Rif led the advance for 5 Brigades' next objective, Sheikh Meskine, a further 15 miles to the north. Throughout the day Vichy aircraft and armoured cars harried the line of march. 3 Section 18 Company's diarist records being continually bombed and machine gunned, particularly on reaching Ibtā close to the objective. In order to divert the enemy's attention, while the battalion formed up for its frontal attack on Sheikh Meskine at 1530, 3 Section was ordered to demonstrate aggressively on the right (east) flank. However, the battalion's attack was held up by heavy fire and the enemy's position had to be turned by seizing a ridge to the north west of the village. This was achieved by 1900 with the intention of renewing the attack on the village next day. While this was going on the section was ordered to exploit the water sources, as ever, the vital desert commodity. A pump house was located in Ibtā and temporary supply arrangements were effected. 2 Section and HQ 18 Company following up with 3/1 Punjabis spent most of the day (June 8), when not being bombed or machine gunned from the air, examining the railway and installations for demolition charges, mines and booby traps.

During the night (June 8/9) the enemy unexpectedly withdrew from Sheikh Meskine and 4/6 Raj Rif moved in next morning. With 5 Brigade's objectives achieved it was now the turn of the Free French units who had already started moving up. Meanwhile 3 Section, having fully established the water point at Ibtā during the morning, moved up to Sheikh Meskin on its own initiative. Movement was very difficult as the road was choked with Free French transport. Eventually the section rejoined 4/6 Raj Rif and took up a defensive position. Not surprisingly they were also required to find and exploit water sources there, which they did by setting up another pump and supply point. A fuel dump was also found. Meanwhile 4/6 Raj Rif occupied Ezraa, six miles to the east. 2 Section, who had been making a diversion round a demolished road bridge two miles north of Deraa, provided a detachment to set up a water point in Ezraa.

5 Brigade pause while Free French take over the Advance

Over the next three days 5 Brigade Units (less 1 Royal Fusiliers) rested and replenished in the Sheikh Meskine/Ezraa/Deraa area. 18 Company put Deraa power station in order, increased issues at water points and, surprisingly, opened up further points for the Free French on reaching Sanamein and Rhabanareb (known as "Rhubarb"), 30 and 50 miles respectively to the north of Sheikh Meskine (probably the work of 1 Section). High priority was given to repairing reservoirs as only five portable canvas ('S') tanks were available for supplying 5



Brigade and the Free French forces. The company diarist, with tongue in cheek, wrote that resources were "under a slight strain, particularly for medical units and rear echelons, when people try to have baths". The Free French legionnaires were prone to try to do this in 'S' tank purified drinking water. On June 12th 3 Section war diary said that the section was ordered to look for a steam roller. They found one two miles away and brought it back into Ezraa. Their versatility was demonstrated later the same day when an NCO and eight sappers were ordered forward for defence duties. Next morning at 0415 they opened fire on an enemy patrol. On June 13 the company was concentrated in Sheikh Meskine - 1 Section from Kuneitra, 2 Section from Ezraa, and 3 Section from Deraa.

As already mentioned the initial Free French advance from Sheikh Meskine was rapid, but by June 14 they were critically held up by strong defences about 12 miles south of Damascus in the Kiswe area. The village sat in a bottleneck between Jebels with a moat-like stream, a maze of irrigation ditches and an anti-tank ditch in front of it. The Free French declared it impregnable. Their general had been wounded and Brig Lloyd now took over battle command (Lt Col WI Jones of 4/6 Raj Rif succeeding him in 5 Brigade). 3/1 Punjabis with 2 Section, and 4/6 Raj Rif with 3 Section 18 Company moved forward during the night of 14th to help the Free French. Units of the Trans-Jordan Frontier Force took over Sheikh Meskine and Ezraa while Deraa was handed over to the Free French. 490 Army Troops Company RE took over engineer support tasks from 18 Company in those areas.

Events on the other fronts had initially also been successful. 1 Royal Fusiliers had seized Kuneitra without fighting on June 8 and were patrolling the area. Little is known of 1 Section 18 Company activities, apart from the predictable report that a water point had been set up in Kuneitra, before the section rejoined the company at Sheikh Mistine on June 13.

Vichy French Counter Attacks

After initial success the Australians were held up on the coast at Sidon and to the north of Merdjayoun, commanding the entrance to the Bekaa valley. With their forces holding on these fronts the Vichy French attacked the British lines of communication in three separate columns; one directed on Merdjayoun, one across the semi desert on Deraa and a strong one, in between, on Kuneitra. The counter attacks were launched on June 15. That at Merdjayoun was completely successful, the British and Australian units were over-run and withdrew to the Palestine border. Although the front at Sidon and that in the mountains at Jezzine held firm, further progress was denied for many days of bitter but inconclusive fighting on the central mountain front. This in turn held up the force on the coastal front, due to the threat of attack from their mountain flank.

1 Royal Fusiliers at Kuneitra were attacked by 2,000 infantry with armoured cars and a squadron of tanks at 0345 on June 16. The battalion, less one company

on patrol, fought gallantly through the day, drawing back to a group of houses round their battalion headquarters where at 1730, having ran out of ammunition, they had no option but to surrender. Although Brig Lloyd was aware of their situation, he was unable to send help, as the forces under his command were all forward and attacking Kiswe that day. It seems likely that not more than a sub-section of 18 Company was captured, the rest of the section having moved to strengthen the brigade's primary operations in the Kiswe area.

The third Vichy French counter attack column debouched from Jebel Druz east of Ezraa and captured that town, the Trans-Jordan unit refusing to fight. With a similar unit in Sheikh Meskine, directly on the LofC, now threatened, it was reinforced by the Free French commander in Deraa with two companies, one British and one Free French. Brig Lloyd on hearing the news, while directing the critical Kiswe operations, appointed a new commander, a sapper, at Sheikh Meskine and sent back a battery of British artillery and a reserve battalion of Free French at "Rhubarb". They arrived after night-fall. The Vichy French attacked next morning but after a three hour battle they were forced to withdraw back to Ezraa; their only success being the destruction of a British petrol convoy. That evening a British battalion arrived from the south which enabled Ezraa to be retaken next day, after a desperate fight between Vichy and Free French forces, a British Frontier Force officer with a very ad hoc rescue column finally over-running the fort and taking 170 prisoners. The remainder of the Vichy French force fled back through Jebel Druz to Damascus.

The Battle of Kiswe

During June 14 preparations for 5 Brigade's attack on Kiswe with 3/1 Punjabis planning to lead the assault on the village itself, their company commanders were advised by the Free French officers that their legionnaires had declared "Les anglais sont foux". The plan was for two companies of 3/1 Punjabis with a part of 2 Section 18 Company to attack the village frontally while the other two Punjabis companies headed round its western side, with the Free French attacking east of the Damascus road.

The attack, after gunner harassing fire, went in before first light on June 15 with traditional sapper support, 2 Section providing ladders, which 18 Company had made overnight, for use in crossing the anti-tank ditch. After fierce hand-to-hand fighting the village was taken at 0900. 1 Section had already during the night started repairs to the main road bridge.

4/6 Raj Rif with 3 Section in support took over the second phase of the attack on to the knolls and higher ground to the north west. The objectives were achieved on foot while enemy armour was being engaged by the battalion's carrier platoon. Although suffering heavy loss in the unequal skirmish, the platoon drew off the enemy armour at a critical stage. During the afternoon the enemy counter-attacked with infantry and tanks against both the 5 Brigade

battalions but were beaten off after stiff fighting. In the evening the Punjabis silently renewed their attack and a quick follow-up established them on top of Jebel Madami. On the extreme left C Company of the Fusiliers, which had escaped capture at Kuneitra, cleared and held the hamlet of Moukeble. The ford leading to it, through the Nahr-el-Awaj, had been made passable the day before by a detachment of 2 Section. All 5 Brigade's objectives for the June 15 had been secured, but the Free French on the east side of the Damascus road were less successful. After some initial success they met bitter resistance from the knolls to their north and by 1300 their advance came to a standstill.

On June 15 the company (less 1 Section) moved with brigade headquarters to Moukeble. 3 Section set up a water point and built a lorry bridge over a stream, with local materials.

Brig Lloyd decided to press on with 5 Brigade on the left and 4/6 Raj Rif, during the night 15/16th, again passed through 3/1 Punjabis and advanced across the plain capturing Aartouz on the road from Kuneitra to Damascus. 2 Section were then tasked to set up road blocks in the village. Meanwhile 3 Section, who were providing flank protection there, were shelled, bombed and attacked by tanks but managed to hold on, although complaining that their anti-tank rifles were ineffective. It would seem that the company's assault and defence tasks resulted in water supply being neglected, as both battalions were without water for 24 hours with a consequent lowering of morale.

Despite Free French continuing attacks on Jebel Kelb to the east of Kiswe-Damascus road, on June 16, they failed to take it, suffering heavy casualties from vicious air and tank sorties. However, instead of holding back 5 Brigade, to conform to the Free French alignment on the right, Brig Lloyd decided to press on in the centre and left to capture Mezze; a detached suburb of Damascus at the mouth of the gorge carrying the road and railway to Beirut.

The Battle for Mezze

Throughout June 17 the two Indian battalions and 18 Company rested and prepared for a 18/19th night attack. 18 Company's diarist records heavy shelling on the start line, but the night march (less 3 Section who had been left at Aartouz) was otherwise without incident until the Punjabis advance guard reached Mouadamiye, on the southern approach to Damascus airfield, 5 miles from Mezze. The Sikh 'A' Company captured the fortified village but suffered severe casualties. Meanwhile 'D' Company working along higher ground to guard the left flank, came up against heavy fire from machine guns. 18 Company following up with the vital 'A' echelon vehicles, and believing the Punjabis to be on the road in front of them, ran into an enemy road block which opened fire at very close range. Those in the lead withdrew precipitately. One of the 18 Company officers found the Punjabis hillside company and with their assistance extracted most of the vehicles and their precious loads of ammunition and supplies. Having

escorted them into a safe harbour, the two Punjabis companies and 18 Company (less elements) resumed the advance on Mezze, disregarding the minor objectives around Mouadamiye. They followed up 4/6 Raj Rif Group which had again leap-frogged through and "disappeared" into the night, after being joined by a detachment of 3 Section. As the Punjabis/Sapper column neared Mezze at first light, two small forts on the left flank above them opened fire. An attack was mounted which seized one of the forts, but against intense small arms and concentrated mortar and artillery fire, they had to withdraw down the hillside. Capt Harley, the last remaining Punjabis officer in the two companies, was wounded in the withdrawal and Maj Stuart of 18 Company took over command of the column. Retirement was not a feasible option as, in addition to fire from the forts, the road was swept by machine guns from the airfield pill boxes and from tanks. The column took up a defence position in a "Damascus" garden where they enjoyed, according to the diarist, "biscuits and tea enhanced by ripe apricots from the garden". They were reinforced later by 'C' Company of the Fusiliers and an artillery OP party.

Meanwhile 4/6 Raj Rif and 3/1 Punjabis (less two companies) and part of 2 Section who had had a twelve mile night march, attacked Mezze in the early morning (June 19). After vicious fighting Mezze was cleared and 40 prisoners taken. 18 Company's war diary records that Lt Fraser was wounded in the attack, but it seems more likely that if he was 1 Section commander, the attack may have been one in which the main body of 18 Company were involved on the outskirts of Mezze, which they occupied in the evening taking up defence positions round column headquarters. The company also sent out a patrol to look for Punjabis survivors. Next morning the Vichy French counter-attacked, 1 Section being involved in repulsing it. Enemy machine gun fire continued in the streets.

Brigade headquarters was established in Mezze House, a large square building surrounded by spacious gardens and a high thick wall. The headquarters of both battalions were brought into the building and defence positions prepared. The Vichy French armoured counter-attacks drove back the forward 4/6 Raj Rif Company into Mezze House which became a besieged garrison. On three sides it was protected by gullies. In the front, loopholes and embrasures were knocked in the high garden wall. Molotov cocktails were made, using bottles from which wine was regretfully poured away and the bed sheets in the house were torn up for bandages. All afternoon Vichy tanks came up and pounded away at the defences and were driven off. Night came but ammunition was running short. The house was full of wounded and prisoners. Reinforcements failed to arrive as Verey light signals calling for the rear companies, carrier platoons, main body of 18 Company and the Brigade 'A' Echelon had not been seen. The column was in any case having its own battles on the outskirts of the town as already described. The situation was desperate, so Lt Col Jones selected three 'volunteers' - a Free French captain, a Punjabis jemadar and a sapper officer

(2Lt Cordill*) - to take messages to Brig Lloyd at his Syria Force HQ on Jebel Medami. Crawling and swimming through gullies and streams, and jumping from roof to roof, they reached the outskirts of Mezze and in the early hours next morning they reached Brig Lloyd's headquarters.

It was the first clear news that what had seemed initially a victory was becoming a disaster. The Free French attack on the right from north of Kiswe had failed with heavy losses the previous evening and with their morale shattered, they were unwilling to fight. As Mezze could not be relieved from that quarter, a relief column was the only alternative. It was a scratch force under a gunner major, with a battery of artillery as its main element, picking up the detached remains of Fusilier, Punjabi and Rajput companies, plus their carrier platoons with the Brigade 'A' echelon and the main body of 18 Company in the gardens near the airfield, which the relief column reached mid-morning June 20. However, by then Vichy French artillery had been brought up to help break into Mezze House, but the garrison with almost its last ammunition beat off a last infantry attack. The garrison could hear the guns of the relief column and Lt Col Jones, playing for time, tried to arrange a short cease fire to collect wounded, but it was misunderstood. The Vichy French rushing forward from all sides entered the house, which was by then in ruins, and forced the surrender in the early afternoon (June 20). Thus 5 Indian Infantry Brigade was nearly annihilated with many of its men and all three of its colonels taken prisoner into Damascus citadel, together with the Fusiliers captured in Kuneitra four days earlier.

The relief column reinforced by a fresh Australian battalion, which had been rushed up from Haifa, were just too late. Although they had reached the outskirts of Mezze by the evening of 20th, they were fighting hard to make progress. The same afternoon another Australian battalion (a machine gun one with anti-tank guns) reached Kiswe, where Brig Lloyd had been urging, all day, the Free French to advance. The French refused explaining they were weary after eleven days of fighting without tanks against an armoured enemy. This reluctance enabled the latter to concentrate their effort against 5 Brigade in Mezze. In the late afternoon the Free French agreed to advance behind a screen of Australian machine and anti-tank guns, always keeping just behind them as they moved forward in bounds. Meeting no resistance, they managed to move three miles closer to Damascus, before halting for the night.

In contrast the Mezze relief column with their Australians attacked throughout the night. Dominating Mezze and the road and railway to Beirut to the north was a ridge with seven stone forts. The forts changed hands, in separate several times during the night but by the morning all were in Allied hands. Meanwhile

*Footnote: The name Cordill is taken from Anthony Mockler's *Our Enemies the French* but it seems more likely that in transcription the name 2Lt EG Cox RE has become corrupted, as Cox was certainly 3 Section Commander with 4/6 Raj Rif for the campaign and was most probably with them in Mezze. Also it would account for Cox's Mention In Despatches. Stevens's *Fourth Indian Division* gives the name as 'Cordwell'.

a fourth Australian company skirted Mezze and the forts to find the road and railway at the entrance to the Barada gorge undefended. They chopped down telegraph poles and used captured vehicles to block the road and the railway. By midnight they had 86 prisoners and a long line of captured vehicles at the road block. 18 Company diary for June 21 records the company working on the construction of blocks under machine gun and tank fire on the Beirut road and railway. It also mentions a party being sent with anti-tank guns to the Damascus airfield to construct blocks.

Vichy French Withdraw from Damascus

The Vichy French commander in Damascus had not thought it possible, after the British/Indian disaster in Mezze, that another night attack would be mounted only two nights later. The loss of the forts and the road and railway to the west finally persuaded him to withdraw into the hills north-west of Damascus. History had been repeated. Thirty-three years earlier in 1918, British, Indian, Australian, and French troops, and Lawrence's Arabs had stood at the gates of Damascus, but then the Turks had fled the city and there had been a race between the allied cavalry units and Lawrence's Arabs to get into Damascus first. The Australians had, by a dashing manoeuvre breaking out from the Barada gorge, won the race and gone on to cut the Homs road. With the differing political situation in 1941, it was a question of one group of French rulers taking over from another. There were no great 'feux de joie' or celebrations by the local population, but a formal surrender parade into the city was arranged by the French. However, not to disappoint history, Colonel Blackburn VC and his Australians in their lorries swept past the French generals, in their dress uniforms, covering them with dust and claiming again the race to Damascus.

Unfortunately pursuit of the Vichy French after the fall of Damascus was delayed for three days, allowing them time to fortify the impregnable heights close to the eastern approaches to the Bekaa valley. When the Australians, reinforced with two British battalions, were allowed to attack through the Barada gorge they met the heaviest Vichy artillery fire of the campaign and were driven back, with heavy losses, from the heights above the gorge.

18 Company with the remains of 5 Brigade stayed in the Mezze area for the next week. The company, with others, occupied a Foreign Legion barracks. They were heavily shelled on June 22. On that day they made the blocks on the Beirut road removable and provided a detachment to guard them. The next day they were clearing blocked roads in Mezze and, while wiring in a petrol dump, were machine gunned by Vichy French aircraft.

Eastern Syria and Euphrates Valley Actions

Although there was now a pause on the Damascus and Lebanon fronts for reinforcements to arrive, the advance of British and Indian forces from Iraq and

north-eastern Trans-Jordan had just got under way. As described in another chapter the pro German Rashid Ali rebellion in Iraq had been put down by the arrival of 10th Indian Division at Basra at the end of April 1941 and also the successful defence of the RAF base at Habbaniya, by a small force under Col OL Roberts (a former Bengal Sapper - later General Sir Ouvry Roberts). By mid-June the British/Indian forces in Iraq and eastern Trans-Jordan were ready to attack Syria on their fronts. Habforce, a strong British/Arab Legion brigade group of lorried infantry and armoured cars, advanced into the south-eastern Syrian desert with the Syrian oil pipe line stations, Palmyra (and ultimately Homs) as their objectives. Operations were fluid and protracted against a number of small pro-Vichy French garrisons and outposts of Legionnaires and Arabs. The actions had little effect on 5 Brigade's advance on Damascus; Palmyra itself not being taken until July 3.

There were no Bombay Sapper units with 10 Ind Div which was, by late June, in Northern Iraq; Maj Gen WJ Slim having become the GOC. Their advance up the Euphrates started on July 1 and Deir-ez-Zor, with its bridge intact, was taken on the 3rd and Raqqa on 5th. Meanwhile a small column from Mosul advanced along the Anatolian railway to Nisibin on the Turkish frontier and then to Ras-el-Ain which was cleared of Vichy troops on July 6. Isolated actions took place around Hassatche, Tell Abiad and along the Euphrates to Meskene, over the next four days, before all of NE Syria was in British/Indian hands.

Final days of the Campaign

Meanwhile in the Damascus area, although the Free French had advanced to the outskirts of Homs, there was no progress against the Vichy forces in the mountains to the west guarding the approaches to the Bekaa valley from the east. Maj Gen Evetts and his 6th British Div HQ had taken over from Brig Lloyd and two of the division's brigades had joined the much depleted 5th Ind Brigade.

18 Field Company were concentrated during the last week in June, but with parties daily clearing routes and demolitions in the Mezze area and the disposal of unexploded bombs in Aartouz. The company war diary mentions camouflaging and demolition training starting on the airfield on June 29 and also a visit to the cinema in Damascus - "Quite a change from the street fighting a few days earlier". On the 30th the Company moved to Qatana in the hills south west of Mezze. During the first week of July the routes up into the mountains to the east were improved up to the infantry positions and those forward of them reconnoitred. Mules and muleteers had been brought from Cyprus for portage. Making suitable tracks for them was a task in which the company was well versed from their operations at Keren, in Eritrea, only three months previously.

Over on the coast the Australians with one British brigade fought a fierce battle on the heights above the Damur river south of Beirut. The shelling from

both sides was intense with heavy casualties, the Vichy French committing their last reserve unit. On July 9 they started peace negotiations (through the USA embassy in Beirut) but Allied preparations continued for an attack, westwards through the mountains to the Bekaa valley, by 16 Brigade of 6 British Div, the Australians and the remains of 5 Ind Brigade. 18 Company after opening the road blocks on the road to Beirut were in support of 2/5 Australian Field Company, presumably with a mission to assist in the expected advance across the Bekaa valley and the Litani river. The attack went in on the night of July 10/11 but as the 18 Company diary records "after initial successes, it petered out and the infantry began to retire." While regrouping with reinforcements, news came through that a cease fire was likely. This was confirmed on July 12 when an armistice was agreed and Vichy French resistance came to an end in Lebanon and Syria. The company were visited that day by Lt Col CL Richardson who was presumably the CRE of 6 British Div. With operations at an end it was decided to give the company their overdue TAB inoculations which effectively stopped all activities for them until July 16 (it was medically accepted that TAB inoculations laid low all recipients for at least twenty-four hours).

On July 16 the company investigated a suspected Vichy French minefield in the 5 Brigade area but an exhaustive search only revealed one mine. Four of the jawans who had become prisoners of the Vichy French returned to the company "having had an enjoyable couple of weeks". The professionalism of the company was demonstrated by resuming the NCO cadre class (started during the four-day staging in the Canal Zone while in transit from the Western Desert to the Syrian Campaign). For the next week this and other training continued, also some experimental work on sticky bombs which could be placed unsuspectingly by hand on advancing 'closed down' tanks, so manifesting the contempt the company had for their infantry anti-tank rifles. The remaining jawans (number not stated), who had become POWs, rejoined the Company on the 22nd. During the week the company was also involved in making preparations in Damascus for a victory parade, taken by Lt Gen Maitland (Jumbo) Wilson the GOC Palestine/Trans-Jordan on August 1.

The short campaign had been bitter and 5 Brigade's three infantry battalions had suffered severe casualties, having lost many of their officers and nearly half their jawans. 18 Company casualties were less severe but nevertheless serious with one British officer and thirty jawans killed or badly wounded. Subedar Rehmat Khan was awarded the IOM for his leadership in 1941, also LNK Gharib Singh an IDSM and Lt Fraser an MC but it is not certain that any of these awards were specifically for actions in Syria. More certainly is Maj Stuart's MBE appointment and Lt Penny and Sub Rehmat Khan's awards of the Croix de Guerre. As described earlier, Sprs Pritam Singh and Rakha Singh were Mentioned in Despatches and there may have been others, as the company had a total of eight Mentions for outstanding service in 1941.

Post Syrian Armistice

While the invasion of Syria was reaching a successful military conclusion political events in Persia (Iran) had led to a need for that country to be freed from German influence by Russian and British Indian forces, the main element of the latter was the 10th Ind Div which had to be rapidly disengaged from its occupation of eastern Syria. 5 Brigade were ordered to take over from them and on August 4 moved there by way of Palmyra and Deir-ez-Zor, covering the 372 miles between Damascus and Raqqa in three days. For the next month the brigade settled down to keep the peace between the bickering tribesman until the Free French could take over.

18 Company moved with 5 Brigade. Their war diary records reaching Palmyra by the evening of August 4 and Dier-ez-Zor next day. On the 7th, 3 Section (Lt Cox) was detached with 4/6 Raj Rif to Raqqa and on 8th 2 Section (Lt Penny) accompanied 3/1 Punjabis to Hassatche. Company HQ took over from 10 Div Engrs HQ in Deir-ez-Zor and, on 13th, moved into the former Reduit Richard barracks where 1 Section started repairs. By the 19th 2 and 3 Sections had deployed detachments to Ras el Ain and Tell Abiad respectively. The company diary records little of interest for the next three weeks except to demonstrate their technical competence, particularly by 3 Section who stripped down a discarded old marine engine, found at Deir-ez-Zor, and made it serviceable for a "Flying Bridge" ferry at Raqqa. Capt Plummer the company second in command and Lt Penny found a good excuse to visit Cairo to take an Urdu exam and, no doubt, a few days local leave. They probably missed a parade in Deir-ez-Zor on August 31 for the CinC Middle East General Auchinleck, who had taken over from General Wavell in July.

The company continued to be employed on works services until September 12 when they handed over their tasks to a British Artisan Works company. Next day the OC (Maj Stuart) started a very well earned 21 days local leave, Capt Plummer presumably having returned from Cairo. On the 16th the company prepared to move back to Egypt with the rest of the brigade. 2 Section was sent on in advance to open water points for the brigade at Palmyra and Damascus. By the 23rd the company was back once again in Mena Camp Cairo. There they stayed for a week training on mines and booby traps. On October 1 the company left Mena to rejoin 4 Ind Div at Sofafi in the Western Desert. Capt Plummer was posted from the company to be Adjutant 4 Div Engrs.

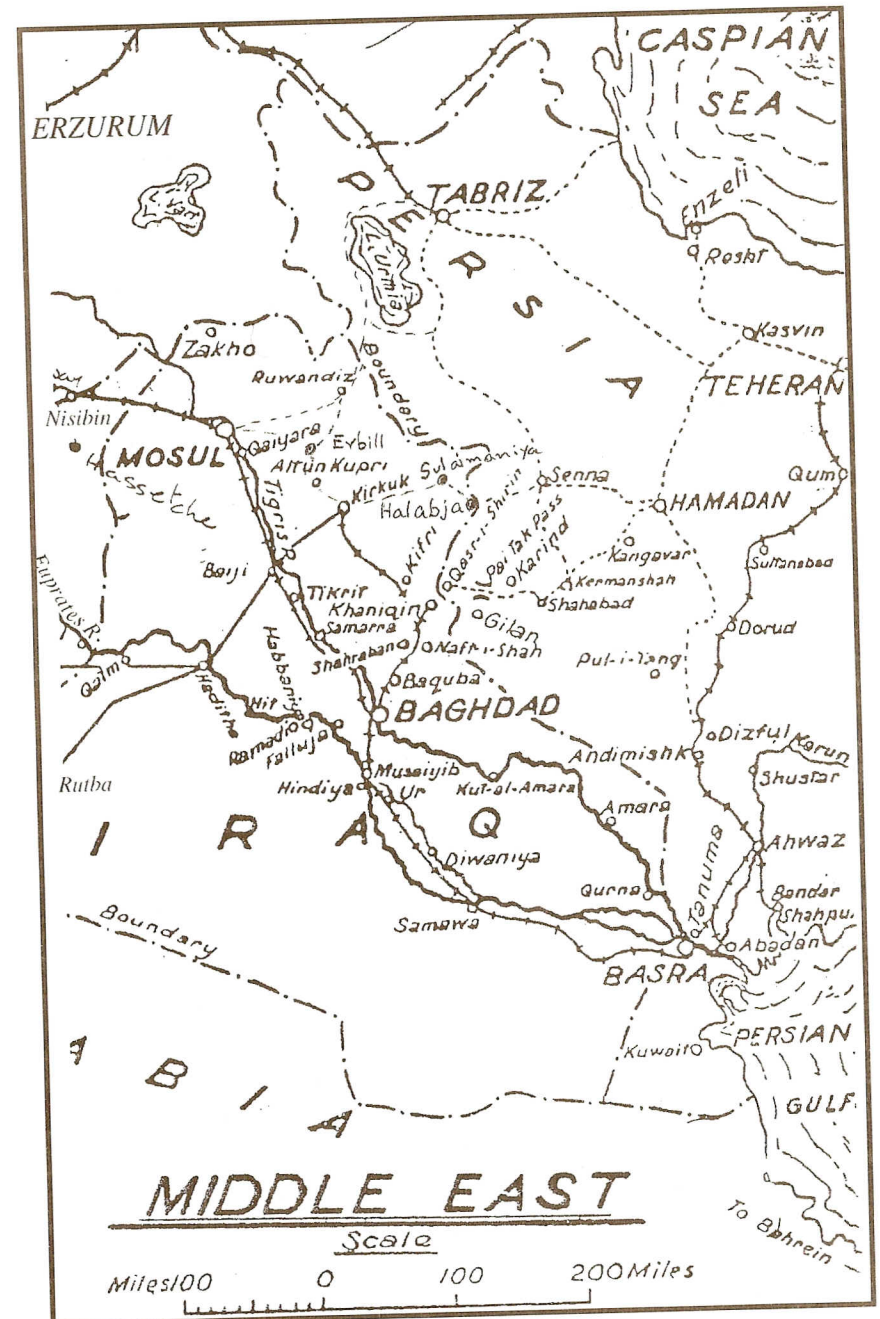
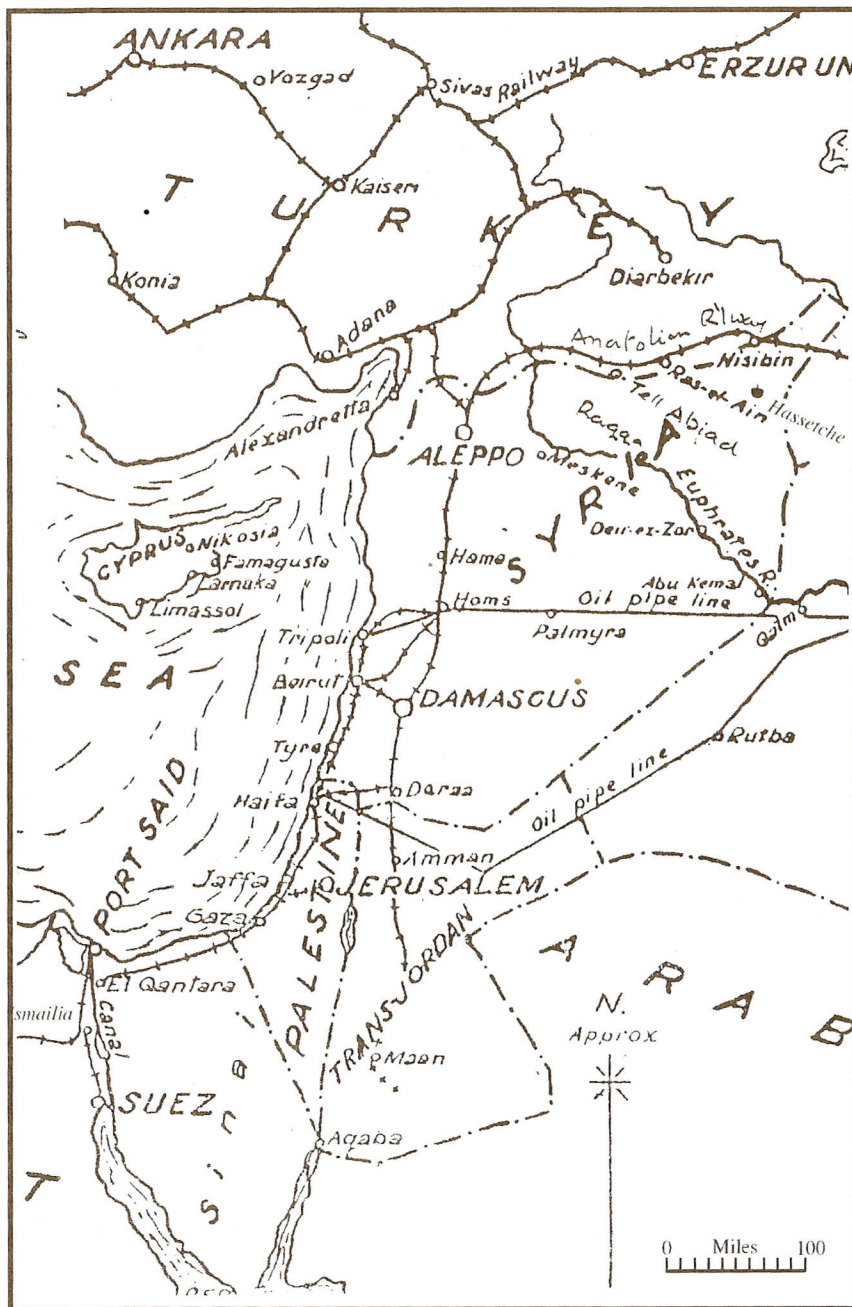
Names of those known to have served with 18(RB) Field Company in Syria in 1941

OC	Maj NL Stuart MBE*
2IC	Capt BAA Plummer*
Section Officers	Lt CC Fraser MC (wounded at Mezze) 1 Section (PMs)
	Lt RD Penny Croix de Guerre 2 Section (Marathas)
	2Lt EG Cox* 3 Section (Sikhs)
	2Lt RWSt G Tyler (May have joined after Sept 41)
BNCOs	Sgts Willcocks and Williams (if still with Coy after Eritrea)
Company Sub	Rehmat Khan IOM, Croix de Guerre*
Jemadars	Maruti Gharpade*
LNks	Gharib Singh IDSM and Swaram Singh*
Sprs	Pritam Singh* and Rakha Singh*) Mentioned in
	Raunak Singh & Chambeil Singh) War Diary

* Mentioned in despatches, but not all may have been for actions in Syria.
(It is not known for certain whether the other decorations, apart from the Croix de Guerre, were awarded for actions in the Syrian Campaign although all are for service in 1941)



Rafting at Basra



CHAPTER SEVEN

PAIFORCE - PERSIA AND IRAQ

1941 - 1946

**HQ 5 Div Engrs; 20,27, and 97 (RB) Field Companies;
49 (RB) Army Troops Company;
301 and 302 Field Park Companies**

**Compiled by Brigadier DA Barker-Wyatt CBE,
Captain JPW Braye and Major DJE Hone**

The background source for this chapter is mainly taken from *The Indian Engineers* and *Ball of Fire* mentioned as sources for other chapters. The details were gleaned from the war diaries of the RB units serving in PAIforce and from the memoirs of Maj Hone, Capt Braye and Capt Wolferstan.

Main Political and Military Events and Movements

To counter German aggression in the Balkans and Greece and to check their designs on Turkey and the Iraq/Persian oil fields the 10th Indian Division (Maj Gen WAK Fraser) was sent, in the spring of 1941, to reinforce the weak British forces in Iraq which were there under treaty arrangements. Two brigades of the division, which had no Bombay sapper units, disembarked at Basra in late April, just as the rebel Rashid Ali, supported by the Germans and their communication aeroplanes based in Vichy French Syria, had overrun the Iraqi government in Baghdad. The rebellion was opportuned just as Athens and some of the Greek Aegean islands had been occupied by the Germans. On May 2 Rashid Ali's rebel airforce bombed and machine gunned the RAF station at Habbaniya which had been surrounded by two Iraqi rebel brigades. They greatly outnumbered the 1200 RAF levies of loyal Arabs, Kurds, and Assyrians but, with a British battalion lifted by air from Basra, a stout defence was established by Col (later General) OL Roberts (a former Bengal sapper). The rebel forces were defeated on May 6 with the capture of 28 officers and 408 other ranks, the remainder being driven towards Baghdad in disorder. The Iraqi Air Force had been practically eliminated in spite of some intervention by German and Italian planes. A British mechanised cavalry brigade from Palestine arrived on May 18 and drove on, assisted by loyal Iraqi troops, to Falluja and Baghdad. There the fighting ended with the Iraqi government restored and Rashid Ali and most of his supporters in flight. The 10th Indian Division was deployed to ensure law and order particularly in the northern parts of Iraq. On June 1st the newly promoted Maj Gen (later Field

Marshall) WJ Slim became the division's GOC, having recovered from being wounded in Eritrea five months earlier, when commanding 10 Infantry Brigade. From June 7 the overall commander in Iraq was Lt Gen EP Quinan with his headquarters in Baghdad.

Having secured Iraq General (later Field Marshall) Wavell, the supreme commander in the Middle East, although still heavily engaged with the enemy in Crete and North Africa, now attacked the Vichy French in Syria. The bitterly fought campaign which opened on June 8 and ended on July 7 is described in Chapter 6. The main British/Indian, Australian, and Free French attacks were mounted from the Palestine along the coast, and from Trans-jordan an inland thrust on Damascus. By the end of June 10 Div, having quelled the Iraqi insurrection and secured the oil fields in the Kirkuk area, was able to assist the Syrian campaign by advancing up the Euphrates valley and along the Anatolian railway into eastern Syria on July 1st. But there was very little resistance, the Vichy French having committed their main forces to the coastal and Damascus fronts. 10 Div stayed in Eastern Syria for three weeks after the armistice before handing over to 5 Indian Infantry Brigade, with its integral 18 (RB) Field Company, which had fought so hard for Damascus and needed some rest. However, there was not a lot for 18 Company to do, taking over from 10 Div Engineers, the works and bridging tasks of the Syrian garrisons of the Euphrates, until they could be handed over a month later, to a British Artisan works unit, so as to free the company to return with 5 Brigade to the desperate battles in the Western Desert and Cyrenaica.

Long before they were thwarted in Iraq and Syria the Germans had coveted Persia, particularly to deny the Allies the rich oil fields at the head of the Gulf and prevent a British and Russian link up through the country, in spite of its difficult terrain. It was therefore strategically vital that the Persian pro-German elements should be eliminated by a quick campaign to ensure Persia's allegiance to the Allies. To this end operations were started on August 25 1941 on two fronts. In the south, at the head of the Gulf, the 8th Indian Division (comprising only two brigades), which had only recently arrived from India, attacked and secured the Abadan oil fields and installations and Ahwaz on the Karun river and its rail connection with Teheran. The main operations directed on Teheran were by 10 Div to the north-east of Baghdad. Like 10 Div, the 8 Div engineer units were provided by the Bengal and Madras Groups. So the Bombay sappers cannot claim a battle honour, not that there was much fighting, for the successful conclusion of the campaign which ended in a victory parade in Teheran on October 17th. However the internal security situation in Iraq was such that 8 and 10 Divs had to be replaced, if only temporarily, during the Persian campaign. The 10 Div area round Kirkuk and Mosul being the most sensitive, it was necessary to fill that vacuum from resources which could be disengaged and moved quickly from another front. The only formation which could be made available was the 5th Indian Division. The division had in July moved from Eritrea, as described in Chapter 5, to Egypt and was, with their engineer units,

preparing fall-back defence positions on the eastern side of the Western Desert, between the Qattara depression and the sea, which were to become so vital to them and the rest of the 8th Army a year later. On Aug 22 the division, without 29 Brigade and the majority of the divisional engineers, were ordered to move by road expeditiously to the Kirkuk/Mosul area which they reached on September 8th. The activities of Div HQ Engrs (a Royal Bombay staff unit) and 20 (RB) Field Company are detailed later in this chapter. They and the rest of the 5 Div force only stayed in Iraq for a month before returning to Egypt in early October.

The arrival of the 6th Indian Division, also like 8 Div consisting of only two brigades, but including 27 (RB) Field Company, by sea from India during September, provided a further major reinforcement for the now named 10th Army in Iraq and Persia. 49 (RB) Army Troops Company also arrived by sea from India in September. In mid November 301 and 302 Field Park Companies disembarked in Basra. 302 Company was initially a Bombay unit but was transferred to the Bengal Group in 1943 when 301 Company was transferred from Lahore Group to the Royal Bombay Group.

With the submission of Persia and the link up with Russia forged the main priority became the defence of the area and protective duties. 6 Div with one brigade only became responsible for Persia while its other brigade, together with one from 10 Div, were engaged in protection duties throughout Iraq. The remainder of 10 Div prepared defence works in the Baghdad area and the two brigades of 8 Div in the Mosul area. In the latter area two fortresses were built requiring over 1000 concrete pill boxes and gun emplacements, over 100 miles of anti-tank ditch (much of it in rock), nearly 200 miles of roads and over 20 airstrips. Works units, engineer battalions, sapper companies, pioneer and civil labour (20,000 at one stage) were busily engaged. The infantry were also called upon to help the overworked sappers who concentrated rapidly on the conclusion of the Persian campaign. This titanic defence scheme was the most pressing engineer task in Iraq in 1941 and 1942 as it was considered that the Germans in their advance north of the Black Sea would be likely to launch five divisions southwards across the Caucasus into Northern Iraq and Persia. Lt Gen Quinan had not only to meet that threat but also, under General Wavell's directive "to develop such road, rail, and river communications as are necessary to ensure the maximum possible delivery of supplies to Russia."

These defensive and communication works also gave rise to many additional engineer tasks, not only in the construction of roads and bridges (including crossings of the great Euphrates and Tigris rivers), but also all the military infrastructure of a mid-20th century European type army. Water and fuel pipe lines, supply depots, workshops, hospitals, expanding air bases, wireless masts, electrical installations, and ice plants were needed. Camp and barrack works increased with demands for improvements as units became more static and tactical operations were little more than in aid of the civil power. More insulation against weather extremes became a necessity in the burning hot summers of the

south and the icy cold winters in the mountains of the north east. By the summer of 1942 more than twenty sapper and miner units, as well as many specialist engineer ones (including nine railway units) were in Iraq and Persia. Nevertheless there were not enough to meet all demands in spite of recruiting thousands of native labourers to do basic work; but they needed to be supervised, often by the junior NCOs of sapper and miner units.

With the increasing burden of 10th Army's lines of communication and base administrative responsibilities it was decided, in August 1942, to set up a separate headquarters "Pibase" for these functions and a higher headquarters PAIforce, under General Sir Henry Maitland (Jumbo) Wilson, to integrate the activities of both 10th Army and Pibase. Just prior to this, in May and June, 10 Div moved to the western desert to reinforce 5 Div in anticipation of Rommel's offensive on the Gazala line west of Tobruk. To help stem Rommel's advance a brigade of 8 Div was also hurried to the western desert at the end of June. The sapper units (none were Bombay) involved in these moves were replaced from India. 97 (RB) Field Company, one of the reinforcements for Iraq, arrived in October 1942.

It was at this time that the threat to PAIforce was probably at its greatest with German armies north of the Caucasus ready to strike southwards depending on the outcome of the battle for Stalingrad. At the same time the situation in North Africa was most critical with Rommel advancing on the Nile delta. No formations or units could be rested or released from that vital front until it was stabilised and the enemy halted on the last line of defence at El Alamein. The battle of Alam el Halfa (also known as the "First battle of Alamein") finally achieved this during the first week of September. 5 Div and its sappers played an important role in this battle, particularly 20 (RB) Field Company, as is described in Chapter 10. With fresh divisions from the UK coming into the line, 5 Div, which was overdue a rest, was relieved and moved east to reinforce PAIforce. 20 Company and HQ 5 Div Engrs moved there in October along the route they had travelled in both directions twelve months earlier in 1941. The brigade of 8 Div also returned to Paiforce. In addition there were the remnants of the Polish army, which had escaped eastwards, being formed into a corps under General Anders.

The defeats which the Germans suffered in the autumn and winter of 1942/43, in North Africa and Stalingrad, turned the tide on their eastern fronts and the threat to the Middle East and PAIforce was greatly diminished allowing the fighting formations there to be reduced. 5 Div with 20 Company moved back to India in April 1943 and 8 Div moved to Syria in May leaving 6 Div as the only Indian infantry formation in PAIforce. 301 Field Park Company moved to Syria in May where they stayed until April 1944 when they moved again to the Palestine and Egypt before going to Italy in August 1944. 97 Company also moved out of PAIforce in July 1943 to the Suez canal zone where they joined "Brick Force" preparing for amphibious operations in the Dodecanese, which were first postponed and finally abandoned in October 1943. In February 1944 they shipped

to Italy. 27 Company remained with CRE 6 Div in Persia and Iraq until moving with 29 Infantry Brigade to Syria in March 1944. The company returned to Iraq in May and served there and in Persia until returning to India in August 1945. 49 Army Troops Company remained in Iraq until returning to India in June 1946.

HQ 5 Div Engrs and 20 (RB) Field Company

September and October 1941

HQ 5 Div Engrs and 20 Company (Maj Winchester), after arriving in Egypt in July 1941, spent the next month reequipping, absorbing reinforcements and training before moving towards the Western Desert in mid August. Having reached the base area of Burg-el-Arab they were turned around and ordered to move quickly overland to Iraq. With daily moves of between 100 and 200 miles with 10 Brigade through Palestine and Trans-jordan, 20 Company arrived in Kirkuk 12 days later on September 6th. Div HQ arrived on the 9th. The GOC (Maj Gen Mayne) and CRE (Lt Col Napier) flying there via Baghdad.

20 Company were employed at first on camp works and water point reconnaissance. The company also provided a protection party for Lt Stubbs, one of CRE's field engineers, to visit Mosul. Although Rashid Ali had been driven from Baghdad some of his supporters were still a threat in the Kirkuk/Mosul area. It was the primary role of the two brigades to meet that threat. Protection parties were needed for all movements in the area. The main engineer task was to reconnoitre the routes from Kirkuk into Kurdistan and north eastern Persia. The CRE and OC 20 Company, with a section from 20 Company for protection, looked at the routes in the Sulamaniya-Halabja area. One route reconnoitred on foot was found to need two months work for use by motor transport. Another was found fit for light vehicles. On the Persian frontier they were joined by the GSO1 of the division and an additional protection party provided by the Highland Light Infantry. They continued the reconnaissance into Persia as far as Senna finding the route fit only for light vehicles. Potential sites for creating bridge demolitions and anti-tank obstacles were also noted. At the same time a similar, but more junior party under Lt Abbott, with another section of 20 Company for protection, carried out a reconnaissance further north in the Ruwandiz area. Both parties completed their inspections and returned to Kirkuk on September 21st and 22nd. The information was to prove useful in future communications with N Persia and Russia and for the defence of Iraq.

By September 27th it was apparent that any significant resistance to the annexation of Persia by 8 and 10 Ind Divs advancing in the centre and south was unlikely. 5 Div was therefore no longer required in northern Iraq as the security situation there was well in hand and 10 Div were able to resume responsibility. 5 Div were therefore ordered to move to west Iraq. This had already been anticipated by the CRE who had ordered 20 Company to send an

officer (Lt Mills), in advance, to find suitable water points for the division at Diltawa and Falluja. Div HQ and 20 Company moved to those places respectively on the 27th. There was little to do at either location but 20 Company took the opportunity to do some section training for a week. Then with Persia safely on the side of the allies, 5 Div with their Engr HQ and 20 Company moved back overland through Transjordan and Palestine to Egypt between October 6th and 18th. HQ 5 Div Engrs went to Cairo (Mena camp) and 20 Company to Kabrit, in the Canal Zone, with 9 Brigade. It is interesting that the CRE should have attended a combined operations course there for a week at the end of October as it is evidence of the division being warned for such employment. However his HQ and 4 (Bengal) and 20 Companies were ordered to Cyprus at the beginning of November. Their activities there are described in Chapter 9.

October 1942 to April 1943

As described in Chapter 10, HQ 5 Div Engrs and 20 Company, along with other 5 Ind Div units handed over their positions and responsibilities south of El Alamein to 4 Ind Div on September 9th. After two weeks in Cairo re-equipping and training they moved once again overland to Quetta Camp Baghdad arriving on October 10th. There for the next two months 20 Company worked on camp structures for the divisional units and carried out individual training. Throughout November there was a unit cadre class for junior NCOs. Maj Winchester was acting CRE with Capt Abbott acting OC 20 Company until November 20th when Maj Winchester returned to the company. For the next three weeks he managed to override the never ending demand for camp works' tasks and set the company some intensive training on wiring, mines, demolitions and water supply. On Christmas Day, having been with the company for eighteen months, he was posted to the UK, where he later commanded a parachute field company at Arnhem. Capt Abbott was promoted and appointed OC 20 Company. On New Year's eve they moved to Latafiya camp, with 7 Armoured Brigade. Here for the first four months of 1943. The company spent most of their time training. Some was with their now affiliated 9 Infantry Brigade. At the end of January the IOR strength of the company was 264.

In February bridging was the main subject in their training programme, particularly with SBG and FBE bridges and rafts. Demonstrations of mine laying, bridging and demolitions were given to other arms. The CRE and his HQ, and possibly 20 Company, was involved in a 5 Div bridging and demolition demonstration to about ninety senior officers from GHQ PAiforce, who stood round a jeep on a bund. Two early vintage transport planes, after dropping some parachutists, decided to simulate a dive bombing attack on the assembled "brass hats" who were seen to run for cover. It was just as well they did, as one of the aircraft hit the jeep and crash landed. One rather rotund and unathletic brigadier saved himself by rolling down the bund. The fate of the aircrew is not recorded but it would seem that they were uninjured too.

Another "demonstration" incident at Latifaya was a visit by the young King of Iraq to 7 Armoured Brigade, which 20 Company directly supported and were probably involved. After watching displays of mobility and gunnery and had been given a ride in a tank, the boy king seemed rather disinterested. But on seeing a jeep, which was then a wartime novelty, he asked to be driven about in it. He was so delighted with the ride that it was some time before he could be dissuaded to dismount. As the custom was to give the king something which particularly pleased him, he was given the jeep. This was fortunate for the Scottish officer detailed to be the king's ADC for the day as, prior to the ride, the king had expressed particular admiration for the tartan trews which the ADC had specially put on for the occasion.

It can be appreciated that for a well blooded fighting formation, like 5 Div, their enforced sojourn in PAIforce was a dull time, especially as their 4 Ind Div contemporaries were at the time chasing Rommel out of Africa. The internal security threat was on the wane, particularly after the El Alamein and Stalingrad victories. However, the boring duties of static guards were much increased by the prevalence of "loosewallahs" who by night plagued the camps. Their cunning and ability to penetrate almost anywhere and steal almost anything at night was extremely irritating and frustrating.

The dull routine of guard duties and low level unit training was relieved in the first three weeks of April by extensive divisional exercises. Following this, for 20 Company, was the construction of a bridge over the Latifiya canal by Lt Hughes's section. However, most welcome was the warfing order on April 28th that the division was to return to India. Two days later the company moved to Basra and were probably back home by mid-May, in advance of most of the rest of the division which did not get back until June. After leave, re-equipment and some rudimentary jungle training the division was once more, by the end of October 1943, in contact with an enemy - the Japanese in the Arakan.

Nominal roll of those known to have served in HQ 5 Div Engrs and 20 (RB) Field Company in PAIforce from Sept and Oct 1941 and from Oct 1942 to Apr 1943.

HQ 5 Div Engrs	
CRE	Lt Col AHG Napier OBE
Adjutants	Cpts WHD Wakely and HS Williams
Field Engineers and LOs	Lts TE Potts, JW Hartley, TN Stubbs, PM Head, AR Ballantyne and RT Dawney
20 (RB) Field Company	
OCs	Maj JC Winchester (to Dec 1942), Maj ET Abbott (from Dec 1942)
2ICs	Capt PPMiles (to July 1942 then POW) Capt ET Abbott (July to December 1942) Capt ETR Lawson IE (from Dec 1942)
Section Officers	Lts HM Boardman (killed July 1942), PCM Mills (to July 1942 then POW) ET Abbott, JKN Yearsley, FPM Hughes, IA Ross and JD Holland
Subedars	Daulatrao Chaugle (to Oct 1941), Harnam Singh (from Oct 1941)
Jemadars	Laciman Singh (to Oct 1941), Autar Singh, Ketkai and Faiz Ahmed (from Oct 1941)

27 (RB) Field Company

The 6th Indian Division arrived in Iraq in August and September 1941. The CRE (Lt Col AE Armstrong) had under command 27 (RB) Field Company (Maj HW Kitson) and two Madras field companies. Little is known of 27 Company's activities during the first year in Iraq as their war diaries are missing. It seems likely that they spent most of the winter in the Pai Tak pass area, near the Persia/Iraq border, constructing defence positions in the mountains astride the main route from Baghdad to Teheran (see 302 Field Park Company account). Having endured the very cold winter there, the company then had to spend a very hot summer in the plains of Iraq. One unfortunate Mahratta sapper went into hospital with frostbite in the winter. He returned to the company some time later, via convalescent and transit camps, but by then they were enduring the extreme summer heat of the plains. It was too much for the young jawan who was hospitalised again, this time with heat stroke.

The time the company spent on the Persia/Iraq border, although arduous, was profitable as regards the Company Institute Welfare Fund. Because of a difference in exchange rates of rupees to dinars in Iraq and dinars to rials and rupees in Persia, a net gain could be made by cash exchanges. 27 Company, apparently from the story, took advantage of the situation by "dhobiing" their weekly pay across the border, between the army field cashiers in each country, the profit being absorbed by the Company Fund.

The war diary, starting in September 1942, shows 27 Company in Tuleh camp, which was probably north of Baghdad, but does not indicate what they were doing. In mid October, having transited through Khanaqin, the company settled, for at least three months, at Qasr-E-Shirin on the Iraq/Persia in the foothills west of the Pai-Tak pass. It would seem that for much of 1942 the company was under corps or army troops command, as the January 1943 diary records their return to CRE 6 Div command. With the war diary not recording a move until May, it must be assumed that the company remained at Qasr-E-Shirin until then. There is no record of the company's activities there. Early in March Maj Kitson was temporarily appointed CRE and Capt Marlow, with promotion, became OC 27 Company. In mid April a new CRE, Lt Col LAB Paten, arrived and Maj Kitson departed to take over 4 (Bengal) Field Company in Tunisia (see Chapter 10).

In May 1943 the company was at Kermanshah about 100 miles inside Persia where it seems they remained until late July. Over these three months the training priorities were the construction of flying bridges (rafts), Inglis bridging and booby trapping. Also, some officers were sent on instructional courses, mainly in the Middle East. In August the company were at Bisiton (east of Kermanshah) but in September they moved back to Iraq and were stationed in Qizal Ribat, on the Diyala river north of Baghdad. Training presumably continued as there is no record of any other activity. Although there is no mention of works tasks in any of the war diaries it is more than likely that the company were often so employed. However, there is no doubt that much time was spent on training and a very high standard of military proficiency was achieved. It is understood that

Lt Col Peyton at the end of the war was known to have stated that 27 Company were "the best trained company he had ever seen in the Sappers and Miners."

Still at Qizil Ribat in January 1944 the company concentrated on individual training. The newly joined young Lt Braye remembers that three rather large and well fed billy goats wandered loose about the company lines. On enquiry one of the Jemaqars told him that the goats had come up in a ration lorry, for Indian troops all rations came up on the hoof, nearly a year before, but were so thin and scrawny, they decided to fatten them up. By the time the goats were fat and healthy enough to eat, the jawans were far too fond of them to eat them! The goats served a very useful security purpose by seeing off any strangers at all times - something rather necessary in the Arabian night!

In February the training included Bailey Bridge and Bailey pontoon exercises on the Diyala river, where they put on a pontoon raft demonstration for the division. A Bren carrier from one of the recce units was to be loaded on to the pontoon raft to cross the river; the vehicle, complete with young subaltern in charge, mounted the raft under the direction of a sapper NCO, who was waved aside by the officer on the vehicle, which then drove straight off the end of the raft into the deep river and disappeared with the officer's cap floating downstream, the crew being safely recovered. The company made their own automatic weapons assault course which was enthusiastically used by all ranks. Furthermore, divisional night exercises were conducted in the pitch black Persian night. By 0200 most of the officers on both sides were deemed to be casualties, whence they repaired to the Officers' Club and the company of the nursing staff of the hospital.

As usual with units not deployed on operations, the company early morning routine parade was taken by the OC who handed it over to the 2IC who, in turn, left it to the junior officers to direct their sections to their duties; all officers making a bee line for the mess and breakfast, as they became free. At Qizil Ribat the route from the parade ground to the MT lines passed between the mess and the officers' latrine. One morning in March, when the company was about to leave for a new location, most of the tentage had been taken down the day before leaving only the three feet high bund walls round their sites. By the time the company sections were marched off to load up the transport, the OC was on the 'throne' where he was visible from the chest upwards. The leading section gave him an 'eyes right' which the rest of the company repeated. He didn't seem too pleased, but discipline is discipline, particularly in the Indian army.

In March the company moved to Mafraq in Trans-Jordan 30 miles north of Amman, and thence north from Mafraq to Damascus and on to Homs. At the end of March the company moved to Tripoli, Lebanon. Here they served with 29 Infantry Brigade. In May they moved back to Khanaqin in Iraq and, in August, to Baghdad and thence to Khorramshahr in Persia but near Basra.

To meet a request from our Russian allies for more petrol, Abadan island had to be connected by road to the mainland, so, on 25th July 1944, GHQ decided to build the Karun bridge, above Khorramshahr. British and American engineers were there with administration, movement and transportation officers. Motor boats ran back and forth across the river and jeeps raised clouds of dust as they forged through the undergrowth. By sunset the siting board had found a place for the crossing.

On 2nd August the advance party from 27 Company arrived by the side of the river and made their camp. Next day pontoon equipment began to arrive on heavy transporters. Two days later the first pontoons were being pushed across the river. American engineers with their heavy road-making equipment made broad straight approach roads through the date palms. GHQ had asked for the bridge to be ready by mid August. On the 15th over 57 pontoons were in position supporting a span of 950 feet and on the following morning the first vehicle went across. In the ensuing period vehicles crossed the bridge at an average of over 650 a day. The bridge could be "cut" to permit river traffic at certain hours of the day. The bridge was subsequently dismantled by 49 (RB) Army Troops Company at the end of the war (see 49 Company account which follows).

In September 27 Company moved to Shaiba, SW of Basra and to Ur (ancient site of Ur of the Chaldees) 100 miles WNW of Basra and on to Habbaniya, on the Euphrates. During January and February 1945 27 Company were back in Khanaqin training. In March they moved to Musariyie (NW of Basra) and then to Nasiva (near Ur). April saw them in Baghdad. From mid-May until the end of July the company were stationed in Zubai (near Basra). Exercise "Ready" from 16th to 20th July must have been concerned with packing up to return to India as the company diary, which is not very helpful in many respects, then ends abruptly.

Nominal Roll of those known to have served with 27 (RB) Field Company in PAIFORCE from September 1941 to July 1945.

OCs	Maj HW Kitson (Sep 41 to April 43)
	Maj TKR Marlow (April 43 to March 45)
	Maj JFG Clarke (March to July 45)
2ICs	Capt TKR Marlow (Sep 41 to April 43)
	Capt RW Gawthropp (April 43 to sometime in 44)
	Capt Clarke (from sometime in 44 to March 45)
Section Officers	Lts Gawthropp and Clarke (before promotion), SR Nautiyal IE, BG Johnson, R Naylor, HTI Bateman, AC Bywater, JPW Braye, A Read, S Turley and WC Muriel
	Lt SC Bhowal and GJ Sarant both IAMC

There is no record of BNCOs, VCOs or IOR names apart from one naik, three sappers and a sweeper in the Roll of Honour Appendix.

49 (RB) Army Troops Company

The company was formed during July and August 1941 at Dighi, under Maj CG Caffin, with an establishment, including reinforcements, of about 370 personnel, including 8 officers. They arrived in Basra, Iraq on 12th September to join Indian Force X as it was then known.

After spending the first 4 weeks in camp about 3 miles from the docks, the company left for Baghdad, camping one night next to Ur of the Chaldees, then crossing the Euphrates and passing by the ruins of Babylon, to arrive at Quetta camp, Baghdad. On 19th October, the company moved to a more permanent site in a palm grove to the south west of the city. The officers' latrine was temporarily sited amongst the palm trees outside the camp perimeter. Regrettably, during the first night, the complete equipment was stolen, much to the discomfiture of the early risers, but this incident served as a warning and thereafter precautions against thefts were greatly increased. The next few months were spent in settling down, some training and carrying out miscellaneous work for the local CRE(Works). The city was by now well established as the HQ of the occupying force.

In March the company moved to Al Musaiyab, 40 miles south of Baghdad where a large area was being laid out as the Advanced Base Depot of 10th Army, the new name of the force. The main work consisted of road construction and installing bridges over irrigation canals and culverting ditches. The climate was very hot with daily sand storms and a move in July to Khanaqin, 90 miles north of Baghdad, was welcomed.

At Khanaqin the work was to help provide camp sites with water-supply for the very large Polish forces which were being evacuated from Russia to form the Polish Corps which later served in the Italian campaign.

The next move, in October 1942, was to Kharramabad, in Iran, to help in the establishment of an advanced HQ for 10th Army, on an open site in a mountainous region. This site was soon abandoned – it was assumed that a winter there would be too uncomfortable for the general staff – and a new HQ was established in Sultanabad (Arak), about 150 miles south-west of Tehran. The company's first camp in Sultanabad was in the courtyard of a caravanserai in the town, but it was very soon noticed that this was next to a local "bagnio" and the ladies of the establishment were prone to parade on the flat roof overlooking the tented area. This was deemed unsuitable and a move was made to another caravanserai. The work consisted of adapting buildings for offices and accommodation. This was an interesting assignment, but somewhat fraught as all work was carried out under the close and watchful eyes of the very senior officers of the Army HQ.

In December 1942 the company made the long journey back to the base area at Shuaiba. Two sections went to Umm Qasr on the coast where a new port facility was being developed. Other work included pipe-laying, camp structures, and the erection of radio masts at the nearby RAF base. Maj Caffin returned to India in July 1943 and Capt CC Smith, the 2IC took over command and Lt DJE Hone succeeded him as 2IC.

In July came a move to Margil, adjacent to the Basra docks. Here, what was undoubtedly the company's most prestigious work was carried out. This was the steel structural work and mechanism of the "Hull" bridge, (named after the Chief Engineer, South Iraq), over the Shatt-al-Arab, (the combined Tigris/Euphrates rivers). The bridge was designed with a rail track and could carry the heaviest tank transporters and locomotives. A "sinking" or "centre drop" span permitted the passage of considerable river traffic when required. Piling and approach works were carried out by other Indian and British engineer units. The work has been described in the RE Journal and in Institution of Civil Engineers papers on *War-time Engineering Problems Vol 1 (Airfields, Roads, Railways and Bridges)*.

Following this, the company moved to an engineer training camp at Qizal Ribat, 70 miles north of Baghdad, for "military" training which was probably long overdue after a lengthy "works" schedule. This lasted from October to December 1943. 27 (RB) Field Company was also there during part of this time.

The whole of the calendar year of 1944 was spent in Abadan, Iran along with other Indian units engaged on the construction of refinery and ancillary plant for the Anglo-Iranian Oil Company. This unusual undertaking has also been described in the RE Journal of September 1947. One feature was that the costs were entirely borne by the oil company.

Despite hopes of returning to India, the company next voyaged to Bahrain Island where they arrived on 10th January 1945 to carry out work similar to that at Abadan but now for the Bahrain Petroleum Company. In May Maj Smith left on repatriation and Capt Hone left on long home leave. Maj J Whalley arrived as the new OC and Lt GA Saville was promoted to 2IC.

The company returned to the mainland in September 1945, and after a brief trip to Khanqin was back at Shuaiba again in November. In December Maj Whalley left on release, and was succeeded by Maj DJE Hone as OC, he having previously been adjutant to the CRE. Although the war had been over for several months, work continued at Shuaiba on such projects as Naafi Institutes, ice-making plant, and other facilities.

In March an order was received to dismantle the pontoon bridge at Abadan which had been erected about 18 months previously by 27 Company. This was expeditiously done despite the fact that the sappers had not had wet bridging

training for some years. The equipment was left stacked neatly on the riverbank as ordered and 49 Company joined the rear-guard of the British troops evacuation of Iran.

On the 24th June 1946, the company sailed for India and arrived at Dighi on 12th July, nearly 5 years after leaving. The company was to be re-organised as all-Sikh and Maj TH Lindesay succeeded Maj Hone as OC.

**Nominal Roll of those known to have served in 49 Army Troops Company
(Aug 1941 to July 1946)**

OCs	Maj CG Caffin, Maj CC Smith (from Jul 1943) Maj J Whalley (from May 1945) Maj DJE Hone (from Dec 1945) Maj TH Lindesay (from Jul 1946)
2ICs	Capt CC Smith, Capt DJE Hone (from Jul 1943) Capt GA Saville (from May 1945) Capt Mowrofi (from May 1946)
Subalterns	Lieuts JC Bose; PB Button; DJE Hone; F Jones; IT Hunter; LH Leighton; JB Hall; S Hindle; CH Pearson; GA Saville; R Tempest; JRM Poole; EJ Tharia; WVFK Watts-Jones; J Mahoney; ED Robinson; D Leah; DW, Lee; HWJ Bateman; DA Kennedy
Medical Officer	Lt Bohari IAMC
BWOs and SNCOs	CSMs Swanson and Lewis. Sgts Swann; Ladbroke and Kelly
Subedars	Fatch Khan; Uttam Singh; Fazal Ahmed
Jemadars	Mohd. Sharif; Daulat Singh; Kehar Singh; Parasaram Mikam; Mahdeo Jadhu
Sub Div Officers (MES)	KI Nanda; RD Chitale; FA Shah ; Maimm and Udapa

97 (RB) Field Company

The company was formed at Dighi in the Summer of 1942 under Maj WF Eason as OC and Capt FJ Pipe as 2IC (the latter had been with 17 and 23 (RB) Field Companies in Malaya, escaping by sea, via Sumatra, when Singapore fell in February 1942 - see Chapter 13). The company subedar was Punderang Muke who remained with the company until it was disbanded on return from Italy in December 1945 (he was promoted to Group Subedar Major in 1947). 97 Company embarked for PAIForce at the end of October. Disembarking in Basra on November 5th they found that many of their vehicles had been damaged during the voyage, and then pilfered for tools and equipment. As usual in such circumstances a company court of inquiry was held. It established that no one in the company was to blame; but the inquiry probably delayed the departure from Al Zubair, the famous old town outside Basra, until December 7th. They then moved, via Baghdad and Khanaqin, to Qasar-i-Shirin, the Iraqi/Persian border town. On the main road from Baghdad to Tehran. There they were under command CRE 6 Div.

97 Company spent a cold Christmas and New Year 1943 at Qasar-i-Shirin. From 7th to 15th January they were visited by a RE mine warfare training team and instructed in mines and mine warfare drills (laying, marking, breaching and lifting). In late January the company moved to Jaloula, the Baghdad-Kirkuk railway junction for Khanaqin, where they had first to reconnoitre a camp site and send an advance party to set up initial basic administration and security structures. On moving there the company became a unit of 3 British Corps Troops Engineers under Brig FWT Hards CBE, an old Bombay sapper. He was much liked and respected and known affectionately as "Daddy". Soon after the company's arrival he unexpectedly visited them, staying overnight. As they had no guest tent, the canteen was emptied and made available for him. After dinner when all the officers had retired to their tents, they were horrified to hear a very loud voiced sapper beating on the canteen tent with a stick and shouting "Oh! Canteen wallah! Give me some cigarettes." Brig Hards kept silent for a few minutes, but the beating was resumed and the sapper started to undo the tent fly and looked inside. He must have been considerably shaken when, instead of the canteen wallah, he came face to face with the irate occupant. By breakfast time next morning, however, the Brigadier, in his usual kindly way, was amused by the incident. (Tragically he was lost at sea in February 1945 when, on returning to the UK, the ship he was in was torpedoed.)

97 Company's activities at Jaloula are not recorded but as they were there for only seven weeks much of their time must have been spent properly establishing their camp also, as a newly formed unit, on training. On March 10th the company moved to Mosul, the main body travelling by train via Baghdad. While in Mosul they became a unit of 21 (Indian) Corps. Soon after their arrival the company 2IC, Capt Pipe, was posted as adjutant to CRE 458 (Indian) Corps Troops Engineers. He was replaced by Capt ADM Dunne from 21 Corps. During March the company's training concentrated on demolitions. In early April the OC and a small support party carried out an extensive engineer reconnaissance of northern Iraq. Soon after the OC's return to Mosul the company was ordered to move back south to Habbaniya, moving there by road and rail on April 17th.

Habbaniya, as well as being the main RAF base, also housed a bridging training unit. On April 20th 97 Company started a bridging course, but as the Euphrates was in torrent training was switched to Habbaniya lake. The course continued into early May. Later in the month the company, now under CRE 451 Lof troops took part in exercise "Sagrada" with Polish units and the RAF. There are no reports of the company's activities in June.

Brick Force

With the invasion of Sicily in June going well and the fall of Mussolini and an Italian surrender imminent, the Allies decided to land on the Italian held Dodecanese islands. Due to other commitments (mainly the invasion of Sicily) only light forces were available for the landings, but it was thought that, with

our help, the Italian garrisons would resist German incursions until stronger forces could be sent. A beach landing group "Brick Force", was already training in the Canal Zone. Composite groups of British and Indian troops known as "Bricks" were formed. In early July 97 Company moved from Habbaniya along the desert pipe line route to Mafrag in Transjordan to join Brick Force and train for combined landing operations.

Throughout July, August, and September the company trained for combined operations, waterproofing vehicles, preparing tactical loading, tables and procedures as well as carrying out exercises with other arms and services. The company seems to have been constantly moving between Mafrag, Afula on the river Jordan (between the sea of Gallilee and the Dead Sea), Tulkarm (north of Jaffa) and the Suez Canal Zone. In August the company were in Lebanon training in mines, mine laying and minefield breaching. They were also introduced to the Bailey bridge for the first time. By the end of September they were proficient enough to provide demonstrations for senior engineer officers and for the Polish Corps Chief Engineer and staff. The strength of the company at this time was six officers, 2 BNCOs, 7 VCOs and 264 IORs.

With the surrender of the Italians in Italy in early September small groups of Brick Force including 9 (Madras) Field Company were landed on three of the Dodecanese islands, with airfields on two of them being the main objective. But before they could be reinforced the Germans attacked the islands and captured the small British/Indian garrisons. With the airfields lost the main Brick Force operation was put back and then eventually abandoned. Some of the small British garrisons fought on but eventually had to give up the unequal fight, without air and naval support, and were captured. Nearly all of 9 (Madras) Field Company was lost but 97 Company, with others of Brick Force, never got to the islands. They remained in Lebanon for the rest of the year. In January 1944 the company moved to the Suez Canal zone and in early February embarked for Italy.

Nominal roll of those known to have served with 97 (RB) Field Company in Paiforce from October 1942 to January 1944

OC	Maj WF Eason
2ICs	Capt FJ Pipe (to March 43) Capt ADM Dunne (from March 43)
Section Officers	Lt AB Rhodes, JFD Dinwoodie, WN Croft, VN Ranade IE
Medical officer	Lt SV Sarant IAMC
Subedar	Punderang Muke
Jemadars	Jadat Singh, Fazal Dad and Pandurang Chowan
BNCOs	CSM CJ Oakley and Sgt RW Halbert

301 and 302 Field Park Companies

These two companies were raised in the late summer of 1941. 301 Company was raised in Lahore and 302 probably in Kirkee. It seems likely that both units were one class companies of Punjabi Musalmen. Due to the expansion pressures of recruiting, training and forming units quickly, it seems likely that there was a mixture of types of Musalman in both units. With them both in Paiforce an opportunity was provided to exchange some IORs, so as to conform to the traditional divide in recruiting Sunnis by the Bombay Group and Shias and Ahmedias by the Bengal Group. The transfer also rationalised the drafting of reinforcements from Kirkee and Roorkee. The reallocation was made in November 1943. Both companies were captain's commands until August 1943.

301 Field Park Company

All the VCOs and IORs in the company were Punjabi Musalmen. Lahore, where the company was raised in 1941, became the depot for the Construction Group engineers, who mainly served behind the forward field force sapper units. The skills required were different and so was the training, but in the early days of the war, with the rapid expansion of the Indian engineers as a whole, the finer differences in recruit and initial technical training were not paramount. (Accordingly 301 Company was reallocated to The RBS&M Group in November 1943). After a short period of unit training in Quetta the company, a captain's command (Capt Wood) sailed to Iraq, disembarking in Basra on November 12th 1941. They continued their training there until the end of the year when they moved to Tikrit 100 miles north of Baghdad. In January 1942 the company was at Qaiyara near Mosul in northern Iraq where they were operating a ferry across the Tigris in very cold weather. The company moved to Kirkuk in February where they stayed until May, probably mainly employed on defence works. After an undisclosed destination "warning order" they moved in June to Kermanshah, 100 miles over the Persian border, probably as corps troops in support of 6 Indian Division, and on to Askaram in July. There Capt Wood handed over command to Capt Thornber. By January 1943 the company was stationed in Khurmutli where they stayed until the end of March.

In April the company, probably now in support of 8 Ind Div, moved first to Transjordan and then to Meskene in northern Syria. There in May they worked on the Euphrates bridge and approaches at Raqqa which had been damaged by floods. Later in the month the company moved to Riyaq in Lebanon where they worked on route maintenance but were also able to do some training and also enjoy the bright lights of Beirut and the tourist attractions of the Bakkar valley.

After this break the company moved to Hammate and later to Chekka Engineers Stores Park, both north of Beirut, to help in the construction of a new road in from the coast, as the coast road was unsuitable for heavy traffic. Good communications to the Turkish border were needed in view of the German

advance towards the Caucasus. Capt (then 2Lt) Wolferstan recalls "The new road was quite a major project in hilly country and we had a large collection of bulldozers, carryalls etc for the work. It seems that EinC Middle East, Maj Gen Tickell, was concerned to know why so much mechanical equipment was used on the project and decided to pay us a visit. We were told to make sure every piece was going full bore on his arrival. I was not in charge of the equipment being a very junior officer and having no mechanical engineering skills. But when the EinC arrived one of his staff came over to me and shouted 'the general says for God's sake stop that bloody noise, he can't hear himself think.'"

After a short presence at Aleppo to help stop riots over wheat shortages, the company went again to Raqqa on the Euphrates for a bridging course. In August the company became a major's command and Capt Thornber was promoted, even though at that time the company was attached to 9 Army Troops Field Park Company.

On November 1st 1943 the company, now at Hnouch in Lebanon, officially became 301 (RB) Field Company replacing the Indian Engineer cap badge for the Royal Bombay crown and the distinctive royal blue shoulder lanyard. Later in the month 301 Company moved to Ablaa in Syria where the company remained until the end of March 1944. In April they moved to Auja (Palestine) where they were part of 3 Corps, 9th Army. There the company trained on Bailey bridging, newly in service in the Middle East, in preparation for their move to Italy in August 1944.

302 Field Park Company - November 1941 to November 1943

302 Company shipped from Bombay to Basra in November 1941 under Capt DH Boydell, arriving there at approximately the same time as 301 Company, but did not stay for more than a few days in southern Iraq. They moved to the Pai Tak pass north of Baghdad, across the Persian border, for work on gun pits, emplacements, bunkers and artillery command posts. The winter there in the mountains was bitter with deep snow thawing during the day and refreezing during the night. The working conditions were appalling, especially for concreting. At the end of February they moved down to Khanuquin for a month's rest and training but moved back to the Pai Tak area in April. Their main task was the construction of defensive positions, now in better weather, but with very unreliable civilian labour. "Dummy rocks" were "manufactured" to be placed with anti-tank mines on likely enemy approaches. However, it seems that much of the works were dismantled in May and the engineer stores recovered. The park at Khanuquin was closed and the stores moved over 100 miles east over the pass to Khermanshah in Persia.

In July 302 Company was 50 miles further east at Kanqavar mainly training for anti-aircraft defence, mine-laying, demolitions and anti-gas drills and

precautions. They also restarted work on widening the road and digging for water in Black Bottom valley. At the end of July Capt Boydell was promoted and transferred to command 52 (Madras) Army Troops Company. Lt Samson became the acting OC of 302. There is a gap in their war diaries from July to Dec 1942 when Capt Sandercock was appointed OC, Samson reverting to 2IC.

In January 1943 the company was further east on the road to Teheran, which was visited to buy workshop tools. Moving back later in the month to Qashri-I-Shirin, 302 maintained and improved two Div Troops water points and laid the foundations for a 10ft wide road bridge. Their stay in Persia ended in February when the company moved westward to Habbaniye bridging camp on the Euphrates. There they trained in raft building, watermanship, mine laying and basic infantry skills.. Capt Sargeant replaced Sandercock as OC, and, at the beginning of March, the company moved north east of Baghdad to Baguba where they continued individual training. They also provided a detachment to operate the lighting of HQ 21 Corps and the Corps Workshop.

In May 1943 the company took part in a Formation training exercise and afterwards moved to Kifri. By June they were back in Kermanshah for more bridging training and trades testing. Training in July concentrated upon mine warfare (laying and breaching) and fitness training and battle order route marches. There is another gap in the war diaries until October when the company moved from Kermanshah to Qizal Rabat, about 20 miles south west of Khaniqin. There they took over the engineer park and were employed on camp and road building.

On November 1st 1943 the company exchanged the Royal Bombay crown cap badge for the Prince of Wales feathers of KGV's Own Bengal Sappers and Miners. The company probably stayed in PAIforce for the rest of the war and was disbanded in 1945.

Nominal Roll of those known to have served in 301 and 302 Field Park Company

301 Field Park Company (Nov 1941 to Aug 1944)

OCs	Capt JG Wood, Capt (later Maj) J Thornber (from Jul 1942) Capt WT Campbell (Feb to Apr 1943 while Thornber in hospital)
2IC	Capt WR Malcolm (from Aug 1943)
Subalterns	Lts AL Talwar, RF Downie, AG Woodward, TC Wolferston, TA Morris, JP Chalke and JD Boardman
BWOs and SNCOs	CSM SWhite and Sgts Crump and Shingsby
Subedar	Raja Khan
Jemadars	Mohd Anwar Khan and Mohd Faza (from Hav) also Said Abid Hussain IMD

302 Field Park Company (Nov 1941 to Nov 1943)

OCs	Capt DH Boydell (Aug 1941 to Jun 1942) Lt (later Capt) JR Samson (Jun to Dec 1942) Capt FN Sandercock (Dec 1942 to Feb 1943) Capt (later Maj) F Seargeant (from Feb 1943)
Other officers	Lts Bateman, GA Lee and Lt Szymkiewicz (attached from Polish Engineers)

CHAPTER EIGHT

SECOND CYRENAICAN CAMPAIGN

August 1941 to April 1942

**HQ 4th Indian Division Engineers,
18(RB) and 21(RB) Field Companies**

Compiled by Brigadier DA Barker-Wyatt CBE

This chapter continues the Royal Bombay history of the North African campaigns from July 1941 where Chapter 4 ends. At that time the only Royal Bombay S&M unit in the Western Desert was HQ 4 Div Engrs. 18(RB) Field Company was in Syria until the end of September. During August HQ 5 Div Engrs and 20(RB) Field Company moved up to the El Alamein area only to be suddenly turned around and sent to Iraq. 21(RB) Field Company was, however, required to stay in the Bir Hakuma Bagush Box area, working on defensive positions, as Rommel was well entrenched in the Sollum area and threatening to resume his offensive, although Tobruk was holding out as a thorn in his side.

The background material for the chapter is mainly taken from *Fourth Indian Division* by Lt Col GR Stevens OBE. The complete war diaries for the period for HQ 4 Div Engrs and for 18 and 21 Companies have provided much of the information regarding their movements and activities. No personal memoirs have been forthcoming.

Marking time - August and September 1941.

The tactical situation in August and September 1941 was relatively static and quiet in the Western Desert. The Tobruk garrison continued to hold out, under Maj Gen Scobie (late RE), and undoubtedly deterred Rommel from pushing further into Egypt. Throughout August and September several sapper companies including 21 Company worked on the defences of the Bagush Box. The tasks included laying minefields, building reinforced concrete and stone gabion OPs and constructing anti tank ditches. Further forward, in the Sofafi area other sappers laid 50,000 mines in a nine mile, with gaps, minefield.

At the end of September the Western Desert Force became the "Eighth Army" with 13 Corps, 30 Corps, Tobruk garrison and a small reserve. In 13 Corps was 4 Ind Div with 5, 7, and 11 Indian Brigades - the 5th rejoining the division from Syria in early October. The only other Indian formation was 29 Brigade of 5 Ind Div which was part of the small reserve which included 2(Bengal) and 21(RB) Field Companies.

Operation "Crusader" with 4th Indian Division

In spite of 8th Army's much inferior air strength and armoured gun power, preparations for a winter offensive were started. There was much for the British, Indian and Dominion engineers to do. To quote from the official history "operating in the desert was a tactician's paradise but a quartermaster's hell from which the sappers were the saviours."

The campaign opened on 19 November with a surprise attack against Rommel's right flank. 30 Corps with its preponderance of armoured units attacked across the desert but in the major tank battle which ensued, in the Sidi-Rezegh-El Adem area, victory went to German armour. 13 Corps had the task of routing out the enemy garrisons in the frontier area and 7 Brigade of 4 Ind Div was initially successful in the battle for the Omars. However, four days after the start of "Crusader", the situation was very serious. The Tobruk garrison's sortie had failed, the New Zealand division along the coast were held at Gambut (35 miles east of Tobruk), the German panzers had broken through the SA Brigade at Sidi Rezegh and Rommel's armour was loose and heading east. Some units of 30 Corps had been lost and the remainder were being pursued eastward. The situation was desperate and by November 23 the army commander (Lt Gen Cunningham) advised the CinC (General Auckinleck) that the campaign should be abandoned. The CinC immediately flew in and assumed command of operations personally for a short period, before entrusting them to Maj Gen Ritchie.

The situation was beginning to be stabilised by the 26th. The New Zealanders had established contact with the Tobruk garrison and 4 Ind Div was able to continue with its task of clearing the enemy out of the Omars. Libyan Omar fell to units of 5 and 7 Brigades on November 30th. After a further enemy attack on the New Zealanders at Sidi Rezegh, 5 Ind Brigade with Central India Horse pushed forward from Capuzzo and by December 2nd had a screen in place fifteen miles east of Sidi Rezegh. Meanwhile 11 Brigade had formed up 12 miles south east of El-Gubi, which the brigade attacked over the next three days. After fierce fighting and considerable panzer opposition, with many casualties on both sides, the brigade was instructed to withdraw. On December 6th they moved southwards to concentrate with the rest of the division.

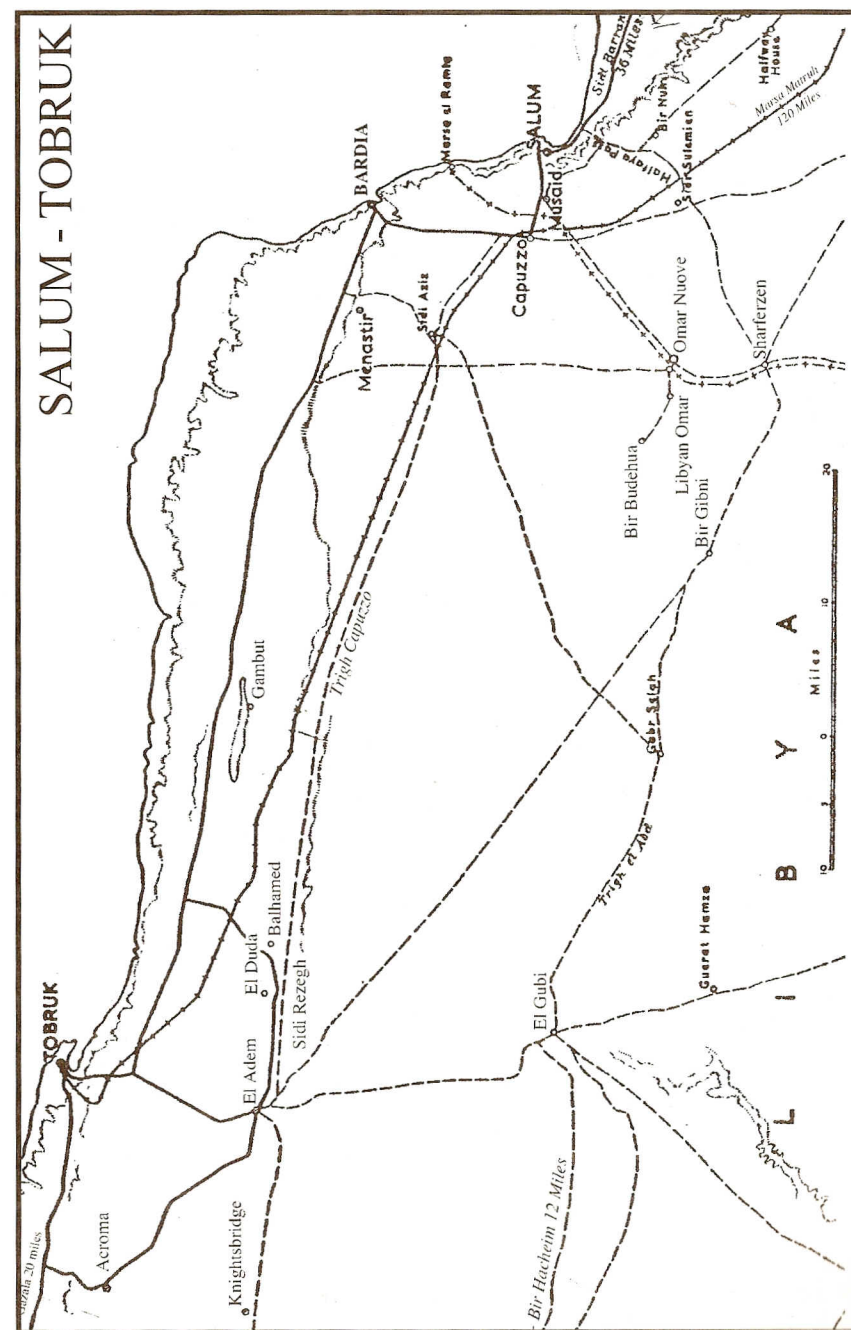
For the next phase of operations 4 Div was organised into brigade groups of infantry, armour, gunners and sappers and they were ready to move again on the afternoon of December 7th. With 5 and 7 Brigade groups leading and 11 following up, they moved north rapidly as the area so recently full of enemy was empty. By the 9th, 7 Brigade's screen reached the edge of the desert escarpment by El Adem landing ground and made contact with Tobruk garrison patrols. To the east 5 Brigade, having rounded El Gubi, advanced to within 13 miles of Acroma where enemy rearguards were encountered. Slipping round them the brigade's squadron of tanks reached the edge of the escarpment where they attacked enemy transport columns heading west along the coastal corridor road and created havoc, until running out of ammunition. Next day Acroma was

taken and an enemy covering force was defeated four miles beyond the town, enabling eight miles of the rim of the escarpment to be occupied. When the Tobruk battle went against him Rommel extricated his forces. The initial "Crusader" battles were over on December 10th and the pursuit of the enemy across Cyrenaica was about to start.

Only 5 and 7 Brigades took part in the pursuit across the Djebel Achdar as vehicles were scarce. 11 Brigade was grounded in Tobruk. On December 11th the advance started with 5 Brigade group on the right, Div HQ group in the centre, and 7 Brigade group on the left. The enemy's rearguard provided stiff opposition at the entrances to the Djebel. The key position on 4 Div front was Point 204 which the enemy failed to defend initially, and was occupied by an all arms force under 1 Buffs. In the afternoon of December 15th it was heavily bombarded, shelled, and attacked by enemy artillery and armour. Casualties were high on both sides and the 4 Div units involved were in effect nearly wiped out, but the enemy force was unable to exploit their local success. 7 Brigade was also held up, but with 5 Brigade, held a continuous line round the bulge created by the loss of Point 204. The formations north of 4 Div had however broken through and were advancing. The Poles, in a magnificent attack, had broken through the Gazala corridor where the enemy had expected to stand firm, and 4 Armoured Brigade had turned south east on the enemy's rear. Thus the enemy by holding on to Point 204 were in danger of encirclement, but Rommel, by abrupt disengagement, withdrew hastily across the desert and was pursued by 5 and 7 Brigades on December 17th.

Both brigades were slowed by German air attacks, bad going and winter rains, particularly on 5 Brigade's route. These factors reduced their advance to 20 miles on the 17th and 30 miles on the 18th. 7 Brigade, with much easier going, reached the Mechili track five miles south of Carmusa during the morning of the 18th. There they wheeled north through Carmusa reaching Martuba in the early afternoon and swept on to the Derna landing grounds which were the main forward air supply centres for the Axis forces. Many aircraft, several airworthy, were found in the dispersals. By nightfall the advance elements of the brigade were on the escarpment looking down on Derna itself. 4 (Bengal) and 18 Companies came forward to work throughout the night on the road which descended by a series of hairpin bends all of which had been demolished. Derna was taken without resistance on the 19th.

5 Brigade, on their heavy going route, reached Carmusa in the evening of the 18th and despatched a strong patrol west along the road, but were held up six miles short of Giovanni Berta by a strongly defended road block in a defile. Next day a brigade attack was launched through difficult country, with cleverly devised anti-tank obstacles, but the protective mines were found unfused. 3/1 Punjabis with a field battery attacked Giovanni Berta. 4/6 Raj Rif with elements of CIH and another battery attacked, after a flanking move, the main highway at Lamluda which was packed with west bound enemy transport. 650 drivers and



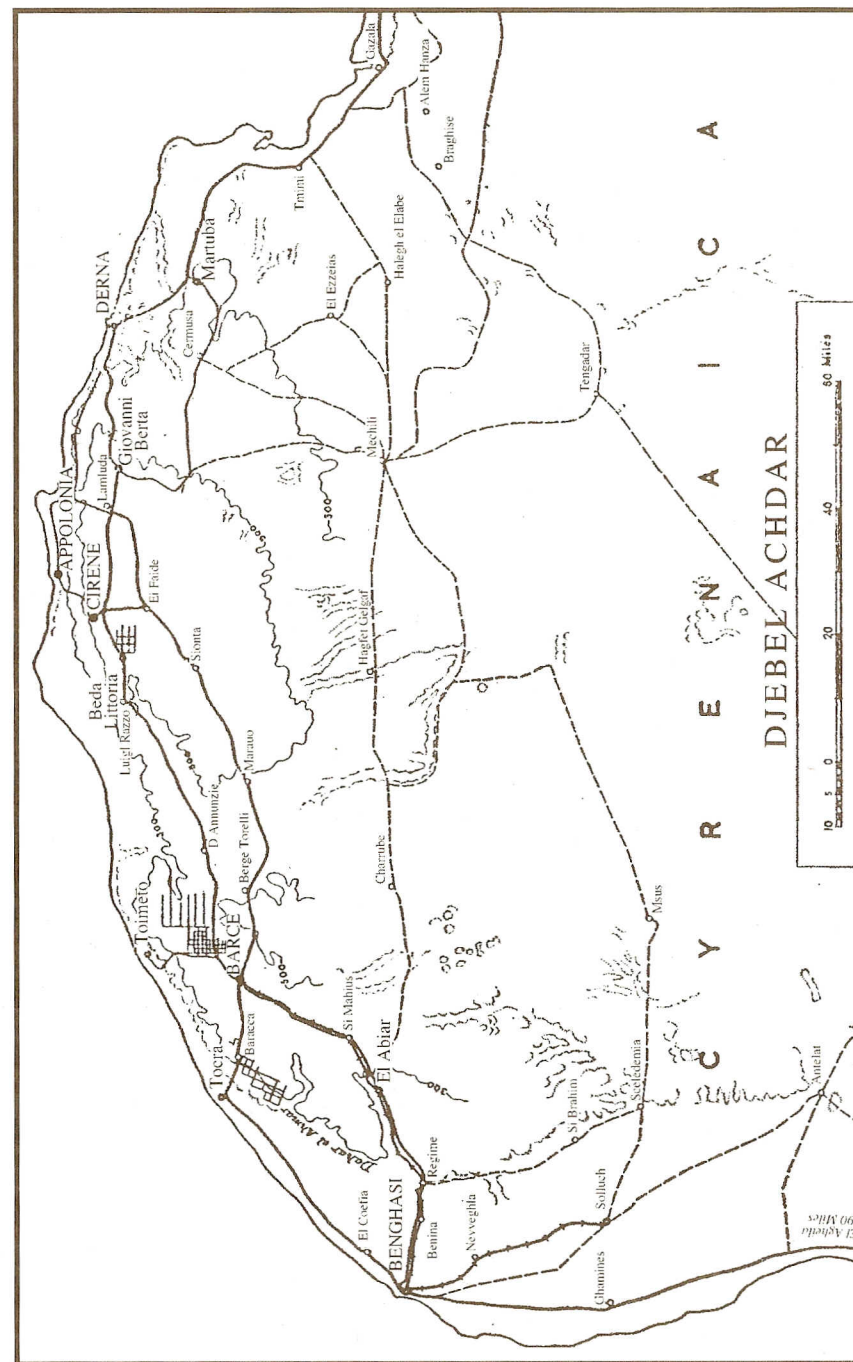
passengers were taken prisoner and sapper road blocks covered by anti-tank guns were constructed. Giovanni Berta was taken on the 21st and 5 Brigade columns pressed down both routes to Barce. Extensive demolitions covered by rearguards slowed progress, but with help on the northern route from 12 (Madras), C squadron CIH and a detachment of South African armoured cars, Barce was entered during the afternoon of 22nd. The road to Benghazi through the Tobra pass, south of Barce, was extensively demolished and impassable. So 7 Armoured Div which had pursued the enemy much further south entered Benghazi on 23rd. CIH patrols using the fair weather track along the railway got there on the evening of Christmas eve. Benghazi had been shattered by RAF bombing but the power installations had not been destroyed and the sappers immediately restored electricity and water services. Many food, fuel, ammunition and equipment dumps lined the roads. The remnants of Rommel's forces had withdrawn to a strong defensive position among the salt marshes of Agheila, 150 miles south of Benghazi.

In the five weeks since the start of "Crusader" 4 Div had taken 6,000 prisoners. 51 tanks and 27 aircraft had been destroyed in addition to inflicting many casualties on the enemy, but it had cost the division 178 officers and 2,455 other ranks killed, wounded and missing. The campaign had earned the division the code name Nonstop. For their festivities at Christmas good Italian food and drink was captured and enjoyed, as well as welcome NAAFI supplies, by 11 Brigade in Tobruk, 5 Brigade spread between Giovanni Berta and Brace and 7 Brigade packing up in Derna to move to Benghazi. On New Year's Day Maj Gen Messervy handed over the division to Maj Gen Tucker and the HQ moved to Benghazi. Messervy was required to take over 1 British Armoured Div which was about to relieve the 7 Armoured Div facing Rommel in the Agheila area.

HQ 4 Div Engrs August 1941 to January 1942

The division and their sappers were fortunate to have as their CRE the highly experienced, respected and admired Lt Col HP Cavendish DSO OBE RE. He had been with the division since its arrival in North Africa in August 1939. First as OC 18 Company, for which service he was appointed OBE, and then as CRE in Eritrea, where he was awarded the DSO. His adjutant in August 1941 was Capt DCS David RE. The 4 Div Engineers under his command in August and September were 4 (Bengal) and 12 (Madras) Field Companies and 11 (Madras) Field Park Company. 18 Company was with 5 Brigade which was in Syria until rejoining the division in October. 6 (Bengal) Army Troops Company was under command for engineer defence works as was 21 Company of 5 Ind Div whose CRE was with his division (less 29 Brigade) on its way to Iraq.

Much of the defence works (fortifications) designs and specifications and desert mine warfare techniques were devolved by the CRE and his staff during the summer of 1941, when Rommel's tactics fundamentally changed those of the Western Desert Force which was to become Eighth Army. Several technical



instructions had already been issued (as mentioned in Chapter 4) and in August a further one on "Pill Box Design and Construction" was adopted. The HQ was still in Bagush, where it had been since May, and remained there until November. In September Lt Col Cavendish and his staff became HQ Engineer Forward Group for field defences and minefield planning. Much work was planned and executed on these aspects of defence throughout September and October. 18 (RB) Field Company returning from Syria, with 5 Brigade, in early October reverted to the CRE's command. However, during the Omars battle at the end of November, Commander 5 Brigade appealed to the GOC for their return to him and, after some debate, this was agreed.

Throughout the "Crusader" operation the CRE and his HQ moved with Div Main HQ. There was some confusion as to whether 21 Company was under the CRE's command, particularly as it was known that they were in possession of the much desired new mine detectors. It would seem that for the tasks on which they were employed, they were initially not under CRE 4 Div, but the company was allocated to him for the first week of December to prepare a new location for 4 Div Rear HQ at Sherferzen. There the adjutant visited them, returning with the new mine detectors which had seemed to be a bone of contention. On December 8th the company left 4 Div on being ordered to Tobruk.

During late November and early December the search for water was a high priority task for 4 Div Engrs HQ officers. Capt Irwin was sent off to reconnoitre Capuzzo (via 13 Corps HQ) mainly for water on November 24th. He did not return and was thought to be missing until reported, over a week later, that he was safe in Tobruk. Communications between the CRE and his companies were very difficult and Lt Beart-Foss became, in December, a courier for orders to the companies. Div HQ was dive bombed on December 13th, but with only minor damage. 18 Company reverted to CRE's command on Dec 16th, just after the loss of No 3 Section at Point 204. Lt Col Cavendish was probably wounded or sick for the first three weeks of December, as Lt Col E Waring officiated as CRE until the 20th when Cavendish returned. Next day Lt Beart-Foss was sent to investigate a new type of Italian mine, which had been found in Derna, and to report on the state of the port there. He estimated that temporary repairs for limited shipping operations would take a week. The logistical problems were well apparent two days later when the general staff requested immediate clearance of a road block near Barce, but the only sapper unit in the area had insufficient petrol to get to it.

The war diary does not state where the HQ was at Christmas but it would seem that it moved to Barce before the new year. On December 31st Capt Irwin reconnoitred Benghazi and found a dump with 4,000 British mines and many enemy ones. The HQ moved there on Jan 4th.

18 (RB) Field Company October 1941 to January 1942

The company (Maj NL Stuart MBE) and 5 Brigade, partly refreshed after two months of garrison type duties in Syria, following their hard fought battles with the Vichy French, rejoined 4 Div in October. The company was sent to Sofafi in the forward area and, after digging and concealing their own defensive positions, were soon at work on dug outs for the Div HQ, gun pits, roads, water supply, mine laying, and in particular an extensive minefield at the end of the month. In view of subsequent events this activity may have been part of a deception plan. Trials were carried out on the new electronic mine detectors, particularly to plot paths through minefields in early November. Five days training, mainly in minefield breaching and gap marking, was achieved in mid-November.

On November 16th the company received orders for operation "Crusader". No 1 Section was detached to 5 Brigade. The rest of the company, after thankfully getting three additional lorries, moved forward 27 miles and, while preparing and resting on the 22nd, practised blowing minefield gaps with gelignite ropes. The same night the company moved forward beyond the frontier wire. On 23rd they were in position west of Libyan Omar but were moved back to Sherferzen. Next day, on orders of the GOC (through CRE) they moved into Omar Nuovo to help 7 Brigade. The following day they were tasked by the CRE to salvage equipment, particularly tanks stuck in the minefields. The extent of the fields had first to be discovered and marked. Lt NB Thomas, with 4 (Bengal) Field Company doing similar work was awarded an immediate MC for his achievements in this dangerous work (six months later he became the OC of 18 Company). On 25th the company were heavily shelled and dug in for protection and also for defence against an attack by a German panzer column which was driven off by "our guns". They were shelled again next day and on the following day (27th) more enemy tanks appeared in front of the company's now wired in position, affording more protection, and were driven off by artillery fire. It was fortunate that a supply column had managed to get through to replenish them and other units with ammunition on the night of the 26th. No 3 Section had the task of giving close protection to 68 Medium Regiment RA for three nights (26th-28th). On the 28th 5 Brigade, with No 1 Section, arrived in Omar Nuovo and the brigade commander (Brig Russell) asked for the whole company to come under his command, but this was initially refused at 2000. However next morning at 1100, it was agreed and the brigade, less 3/1 Punjabis moved northwards on 30th to Capuzzo where the company were particularly charged by the divisional staff to find water. The night before 3/1 Punjabis with No 3 Section attacked Libyan Omar but after suffering heavy casualties, in the sapper section too, they were pinned down in a desperate situation until the afternoon of the 30th. Reinforced with a company of 4/16 Punjabis, a troop of tanks and some bren carriers, the battalion group, although met with devastating fire, took three strong points together with over 200 prisoners by nightfall. One point still held out but the occupants "disappeared" during the night.

On December 1st 18 Company (less No 1 Section) moved to Musaid, between Capuzzo and Sollum, where they acted as infantry defending its southern side. On 2nd No 2 Section took over water point duties in Capuzzo and a German engineer stores dump was found in Sollum. Igniters and devices were distributed to the sections for education and training. Reconnaissance for water was, as ever, a priority task. On the night of the 4th the company moved further westward to Bir Gubi (east of El Gubi). On 5th there was much enemy air activity overhead; nevertheless they moved again on 6th, about seven miles, to the 4 Div concentration area and took up a defensive position in front of 5 Brigade HQ. On 6th and 7th they were dive bombed frequently. The company destroyed several bombs which had failed to explode. Over the next three days the company moved 42 miles northward, with the brigade group, to Acroma where some enemy were captured; one important prisoner being taken to Div HQ by Lt Tyler. In the sky above air battles continued and there were fewer air attacks on the company. Water again was a major logistic problem and reconnaissance parties were frequently deployed on their own. One party nearly bumped into an enemy column. On 11th the brigade group was held up by petrol shortage and moved forward only four miles but, with limited replenishment that night, they moved forward 14 miles on the next two nights. On 13th, with Nos 1 and 3 Sections respectively under command of 4/6 Raj Rif and 1 Buffs, the company recovered three Italian 10-ton lorries and destroyed eight enemy field guns. The pursuit had started.

December 15th was a bad day for the brigade and the company. No 3 Section was with 1 Buffs group of all arms on Point 204 which was, as explained earlier in this chapter, a key position in the northern sector of Eighth Army's advance. The group were well supported with an armoured squadron, field and anti-tank batteries and an anti aircraft troop. The enemy attacked their position, in the early afternoon, first with an intense bombardment and then with 40 tanks and a German regiment (small brigade) of lorried infantry. The Buff group tanks were knocked out as were the gunners, who were without proper cover, the guns being rolled into the ground by the German armour. When the panzers had passed through small parties of Buffs, sappers and gunners were still fighting gallantly and met the advancing German infantry with continuing small arms fire but, by nightfall, had given up the grossly unequal struggle. The company war diary records: "No 3 Section wiped out in action with 1 Buffs. Only nine men (including three wounded-two badly) came back. Lt Cox and all his NCOs were missing but it is hoped that most are POW as Buffs were seen surrendering when the rest of the section were last seen alive."

During the night 15th/16th 5 Brigade Group took up defensive anti-tank positions with 18 Company guarding the brigade rear sector. However, on 17th the company less No 1 Section remaining with 5 Brigade, reverted to the CRE's command and moved, with 4 Div main group, 26 miles west to Got-El-Afraq. Then next day, with frequent machine gunning from German fighter planes, they moved on to Bir Saddi. On 19th the company reached Martuba landing ground. While checking for mines and booby traps they were bombed - eight 250lb bombs dropping in the company area, but only two men were wounded. A water point was also established

and a small detachment left to run it, while the rest of the company moved on, next day, to Derna airfield to check and clear mines there. They were also to start work repairing the damage done to the Carmusa-Martuba road by German rearguard demolitions. This work and repairs to the Martuba-Derna road continued over Christmas and for the first five days of the new year. The work was then handed over to Polish engineers. UXBs at Giovanni Berta had also to be dealt with in the Christmas period.

On January 6th the company moved to the escarpment west of Derna, once again under the command of 5 Brigade, but their transport was in a very bad state. However they managed to move to Giovanni Berta on the 7th and Barce on the 8th, where they were billeted in the town. The vehicle state summarised in their war diary, and described as typical within the division by its official history, records: "Thirteen of the company's 38 vehicles were of different types, spares were scarce and they were over two years old and worn out from thousands of miles over deserts and mountain tracks. Seven others were relics which towed trucks up the Keren railway in Eritrea and had not been replaced, as promised. Their engines were finished, steering deplorable and frames out of alignment. Of the remainder, one was a lorry captured from the Vichy French in Syria, one had had makeshift repairs after being blown up in a minefield, and another had a shell burst under it and was full of holes." That the company remained mobile was a great credit to the British MT Sgt and the Bombay sapper drivers.

A lull in operations allowed training to start on January 10th with a "blistering route march in heavy squalls". The training continued until the 21st, but there was heavy rain most days and as much training as possible indoors was done. Courses on enemy mines and booby traps were the main menu, although bomb disposal and water supply duties continued in Barce. Nevertheless, the pause in operations for four weeks enabled the company to reorganise, do some training, and, in relative terms, take a little rest after six weeks of intense mobile operations.

21 (RB) Field Company August 1941 to January 1942

Although 5 Div took 9 and 10 Brigades and the divisional HQ Engrs with them to Iraq in September, they only took one of their three field companies. 2 (Bengal) Company remained with 29 Brigade for their Libyan desert flank operations but 21 Company (Maj RWW How) was needed in September to strengthen the Western Desert Force's defences against further attack by Rommel in the coastal area. On arriving in Egypt from Eritrea in early July the company, as with other 5 Div units, had had nearly a month for refitting and training, particularly their reinforcements. In August the company was allocated to the Western Desert Force and moved to Bagush under CRE Engineer Forward Group (which was also HQ 4 Div Engrs) for defence works.

Their first task was to lay a minefield at Bir Hakuma. From mid August to mid September the company worked on building defence emplacements, with

reinforced concrete and stone gabions, within the Bagush Box. After clearing a route through our own minefields there, the company left Bagush on September 14th to take over, from 4 (Bengal) Field Company, the demolition preparations of forward landing grounds and, in the first place, obstruct them with wire and "crows feet" obstacles. Next day, September 15th, orders were received to remove the obstacles. From the 16th to the end of the month work on blast aprons, slit trenches, and dug-outs continued, using Libyan labourers and Indian Pioneers. There was also the usual water supply commitment. In October the company worked on three landing grounds. Six more were improved and maintained over the first three weeks of November, and on the 25th the company moved to Landing Ground 122.

When, at the end of November, HQ 4 Div Engrs ceased to be the Forward Engineer Group HQ for defence works, 21 Company became part of the Eighth Army's small reserve and came directly under the Army's Chief Engineer Brig FH Kisch CBE DSO who visited them on November 26th. The company were delighted as the Chief Engineer, who had been first commissioned a Royal Engineer in 1907, became a Bombay sapper and was second in command of 21 Field Company in France in 1914/15. In the second battle of Ypres, in spite of wounds, he approached within a few yards of the German trenches to reconnoitre their defences. In 1916/17 he was promoted major and served with 3rd Lahore Div in Mesopotamia where he was again wounded. For his services in France and Mesopotamia he was awarded the DSO and the Croix de Guerre. In 1919 he was appointed CBE but retired from active service in 1922 to become a consultant engineer and later the director of the Palestine Road Construction Company. In 1939 he was recalled for service to become a works CRE in Egypt and in February 1941 a brigadier and Chief Engineer Western Desert Force directly under EinC Middle East. He was a brilliant engineer who was to contribute greatly to Eighth Army's ultimate victory. Always near the front line, he was killed by a mine in Tunisia in 1943.

On November 27th the company was put under the command of 4 Div and moved forward behind the division. During the first nine days of December they made gaps in the frontier wire, prepared Sherferzen for 4 Div rear HQ and provided guards and cages for POW in the Omars area. Leaving 4 Div on the 10th the company moved to Tobruk and worked initially on the El Adem and Sidi Rezegh landing grounds, and later on road diversions bypassing Tobruk and Derna. These road works and water supply tasks continued to the end of December and for the first three weeks of January. During January the company was based in the Derna area, less one section in Cirene. The section was initially with 18 Company; probably until the latter moved forward to Barce on the 8th.

Retreat from Benghazi - January to March 1942

Although reinforcements for the Middle East were being diverted to meet the Japanese invasion of Malaya, which had started in December, and two Australian

divisions were preparing to move back to the defence of the Far East, the Eighth Army planned to continue the offensive. Though the long chase and battles across Cyrenaica had weakened the formations, which needed reinforcements in men and equipment, morale in the formations and units remained high. The Royal Navy, with sapper assistance, was repairing Benghazi harbour which was expected to be functioning, to support a full scale offensive, by the beginning of February. The enemy had retreated a long way to the salt marshes of El Agheila 150 miles south of Benghazi but were not as weak as was thought. They were awaiting replenishment and managed to get two divisions as well as replacement tanks, equipment and supplies across the Mediterranean in early January.

There seems to have been no intelligence of Rommel's intentions until January 21st, when enemy forces drove back British patrols and formidable columns of enemy tanks and guns were reported moving forward. To meet Rommel's advance 4 Div was ordered to control the coastal corridor and protect Benghazi. Battalion groups were sent to secure two passes on to the Jebel, 35 and 48 miles to the south of Benghazi. 7 Brigade occupied defence positions 14 miles south of Benghazi and 11 Brigade was called forward from Tobruk. The enemy thrusts eastwards into the desert and northwards along the coast could not be held. To escape destruction the 4 Div forward groups were ordered back, on January 28th, to reinforce 7 Brigade just south of Benghazi. A belated attempt was made to organise the defence of the port but, without hope of reinforcements, the latter was not possible and 4 Div HQ withdrew to Barce. To mislead the enemy 7 Brigade made repeated radio signals for "all forward groups to withdraw behind minefields" (which were largely fictional). 5 Brigade's task was to hold the Tocra pass and the Si-Mahin's escarpment track to the east. Demolitions in Benghazi were ordered, including 6000 tons of captured enemy ammunition. Before dawn on 29th enemy forces moved into Benghazi where they rounded up the demolition engineers who had accepted capture in order to complete destruction of the port.

On January 29th the CinC ordered the demolition of the Tocra pass road and the withdrawal of all troops west of Barce. 4 Div was ordered to stand on the line d'Annunzio-Marana 25 miles to the east. At 1400 the same day the Tocra pass was blown by the sappers as the enemy started up it. Barce was evacuated and the entrances to the defiles in the eastern escarpment were blocked by extensive demolitions. 5 Brigade withdrew on the north road and 11 Brigade on the south road.

On the morning of January 30th 7 Brigade, which had been out of touch since being prevented from withdrawing through Benghazi 36 hours earlier, made contact and arrived safely in Mechili. They had retired in good order, with 1 Armoured Div's help, on the Charruba-Hagfet Gilgaf-Mechili track. With this good news 5 and 11 Brigades began to withdraw on their two routes, reaching the d'Annunzio-Marana line without interference that night. However, they were ordered to continue eastward a further 35 miles to another position along the

Cirene-El Faïda track, the sappers having just enough time to destroy a number of dumps and 13 captured tanks at Lucia Razza. They also speeded up the demolitions on both brigades' withdrawal routes as the enemy were following up closely. By February 1st 5 Brigade was covering Derna where the evacuation of naval installations, the destruction of dumps and essential demolitions slowed the withdrawal. 11 Brigade needing to conform on the southern route. This unavoidable delay nearly trapped the division as the enemy columns had by-passed Mechili and were thrusting northwards towards Martuba which was easily approachable from the desert side.

GOC 4 Div urged speedy retirement to a defensible position and it was agreed on February 2nd to a complete withdrawal off the Djebel, but it was nearly too late. 5 Brigade were making slow time through Derna where Arab looters and demolition work were causing delays. Although enemy columns were closing in on 11 Brigade's flanks the brigade dared not drop back and expose 5 Brigade. It was therefore decided to hold the Carmusa trail junction, 13 miles west of Martuba, to give 5 Brigade time to get clear of Derna. Two half battalions of infantry, each with a gunner battery, were deployed astride the road west of Carmusa, one seven miles the other two miles west. 2 Camerons with the remainder of the gunner regiment were on the Carmusa cross tracks. Two companies were positioned three miles to the north on the Derna trail and the remaining two companies (2/5 Mahrattas) with 18 Company took up a position eastwards on the track to Martuba. The position furthest west was soon overrun by a German column of 60 tanks and 400 infantry mounted in British lorries. After the other half battalion group had fallen back, the enemy was stopped, mainly by excellent gunnery, at the cross tracks. 18 Company also made a valuable contribution, volunteering to act as infantry on the Cameron's vulnerable south flank. The fighting continued to nightfall with no appreciable tactical gain to the enemy, apart from initially weakening 11 Brigade by half a battalion and a gunner battery.

Next day (February 3rd) both brigades resumed their withdrawal, continuing past Martuba during the night, to Tmimi. There the following afternoon the enemy attacked down the Djebel road but were beaten off. 4 Div were now ordered to complete the withdrawal to the Acroma plateau on the Gazala line that night. To avoid congestion on the main road 11 Brigade were ordered to move across country on all but impassable country of nullas, rocks, patches of soft sand and in some places mines. Progress was painfully slow but by dawn 11 Brigade was in open desert and by noon 4 Div with 5 and 11 Brigades were in their new area and in touch with 7 Brigade columns at El Adem and Tobruk.

4 Div had extracted itself from Benghazi at a cost of about 600 men (5% of its strength) due to outstanding team work in successive emergencies, the rank and file taking the chief merit in fighting, digging and moving. Much was indebted to the logistic services who provided water, food, fuel and ammunition wherever required. The transport situation was desperate but by hard work and ingenuity it was kept moving. 18 Company's war diary entry was echoed by many units.

The Gazala line was an outdated defence position and it embodied no natural features which lent strength. The defences as planned comprised minefields partly guarded by static forces in strong points and in part by mobile groups patrolling the mined areas. With 1st SA Div holding the coastal sector and with the Poles and Free Frenchmen to their left, 4 Div was sandwiched between the latter and 1 Armoured Div who patrolled the southern flank as far as Bir Hachiem. 5 Brigade occupied the forward sector of the Div front while 11 Brigade occupied a reserve position, 4000 yards behind, and provided the mine laying parties and mobile columns.

7 Brigade after its escape from Benghazi moved back to the railhead on the Egyptian frontier to refit. On February 22nd, after handing over their positions to 50 Northumbrian Div, 5 and 11 Brigades joined 7 Brigade and started work on fortified positions near Hamra, a trail junction on the escarpment 36 miles south-east of Sollum, where "Playground" and "Kennels" redoubts were designed to cover the southern routes into Egypt. They were sited on commanding ground surrounded by mine belts and aprons of wire, fortified with dug in gun positions, strong points and slit trenches. They were generally known as "Boxes". By March 15th the Hamra positions were nearing completion but on the 16th 4 Div relieved 2 SA Div in the Sollum Box, where LofC and administrative duties were not popular with unit commanders. After a hard campaign they needed time to absorb and train 4500 reinforcements. All hope of concerted training ended in early April when 7 Brigade was ordered to Cyprus, 5 Brigade sent to Palestine to work on defences along the Syrian frontier and 11 Brigade moved to the Canal Zone to train on combined operations.

HQ 4 Div Engrs - January to April 1942

The CRE's HQ moved with Div HQ the sixty five miles from Barce to Benghazi on January 4th and then back to Barce on 11th where the adjutant usefully prepared a demolition scheme, although the division was preparing for an offensive - as already mentioned. On January 23rd 18 Company were also ordered to prepare the Tocra pass for demolitions and road blocks although, even then, the division was still planning to resume the advance. Div HQ, with its Engineer HQ, actually moved forward again to Benghazi the same day. Did the CRE have a premonition that a withdrawal was likely or was he a good sapper who was not to be caught out by the unexpected? By the time the HQ reached Benghazi an offensive by the enemy seemed likely and the CRE's staff assisted in making demolition plans in Benghazi town. Signals were also sent to 18 Company to speed up preparations for the Tocra pass demolitions.

On January 30th the 4 Div sapper companies were ordered to send their heavy equipment rearwards. The same day Maj How, OC 21 (RB) Field Company, who did not seem to be under anyone's command, came forward on his own initiative. He reported to CRE 4 Div, by then in Barce again, and offered to do several useful tasks. One, a water point, was immediately accepted. As the

company was carrying a good quantity of explosives they were also able to respond to 18 Company's call for help on road demolition preparations. The same day 18 Company blew the Tocra Pass demolition on orders from 5 Brigade who reported a "good" crater 50 feet long, 25 feet wide and 12 feet deep and sown with anti-personnel mines.

It would seem that 4 Div HQ with the CRE and his staff left Barce on the last day of the month. They were near Martuba on February 1st, at Tmimi on 2nd, and at Hagiag-él-Battruma, 16 miles further west, two days later. There the HQ was located for the next three weeks. Command of the divisional field companies had passed direct to the brigades they were supporting during the withdrawal. 21 Company, which the CRE took under his wing, were allocated demolition tasks in the Derna area and opened up water points in the Tmimi area. The landing ground there was already unusable having been ripped up by graders and sown with "crow's feet".

The saga as to whom 21 Company belonged continued. 13 Corps HQ ordered them on February 4th to join 1st SA Div, in spite of protests from CRE 4 Div. However it would seem that the order was rescinded, perhaps on appeal to CE 8th Army, as the company remained under 4 Div's control until February 21st, when the company rejoined their own 5 Div in support of 29 Brigade, which had returned from Eighth Army's southern flank to garrison Tobruk.

With the 4 Div field companies directly under command of their brigades during the withdrawal, no overall statistics of the division's demolition achievements were compiled but 18 Company's achievements are described in their account which follows. However, the CRE's HQ war diary does record that the demolitions cost in killed and wounded four officer and 50 IORs and that the Derna demolitions, with days of notice were very successful, but those at Giovanni Berta, with only hours of notice, were not properly completed.

During the two and a half weeks 4 Div defended the Gazala line the main sapper task was filling a large gap, discovered by the CRE, of several miles in the defences between 4 Div and 1st Armoured Div. The GOC ordered it to be closed but warned the CRE that enemy interference of mine laying parties was likely. It was for this task that the CRE must have won the case to retain 21 Company until 5 Div arrived from Cyprus. Initially low fences were put up where no mines had yet been laid in order to give the enemy an impression of continuity. By February 17th the main gap was reduced to less than a mile and its marking and recording was co-ordinated with 1st Armoured Div sappers.

When, on February 22nd, the division was relieved on the Gazala line and moved back to develop the Hamra boxes, the GOC ordered the CRE, who had not been well, to take sick leave. Maj Stuart (OC 18 Company) became acting CRE until Lt Col Cavendish returned on March 5th. CRE works instructions Nos 1 and 2 were issued soon after his return but the division was moved in mid-March to the Sollum Box. Here the CRE issued four more works instructions

including one on minefield recording. It seemed that no records or maps of mines laid round the Sollum Box had been handed over by the South Africans when the division replaced them.

On April 6th Maj Stuart again took over as acting CRE and handed over the Sollum Box engineer tasks and responsibilities to CRE 5 Div, who had arrived from Cyprus. Two days later HQ 4 Div Engrs departed for Cairo and on to Kabrit where they arrived on April 28th.

18 (RB) Field Company - January to April 1941

The pause in operations, for two weeks in Barce in the middle of January, gave the company enough time to reorganise and recoup for the hectic events which were to follow, from January 28th to February 3rd. The company strength at this time was 5 officers, 5 VCOs, 2 BNCOs and 213 IORs excluding non combatants.

On January 22nd the company disposed of 5 tons of bombs on Barce airfield and took over a water point there from 12 (Madras) Field Company which was going forward with 7 Brigade. Next day the CRE's orders were received to prepare demolitions on roads rearwards, and some on the Barce-Derna south road were started. On the 24th, No 3 Section continued with this task and No 2 Section started preparing demolition chambers in the road through the Tocra pass. To ensure explosive supplies, the company 2IC, Capt Plummer, went to Benghazi to get what was needed. No 1 Section remained doing bomb disposal and water point duties in Barce. Next day all three sections continued with their tasks and reconnaissance was carried out for further demolition belts on the Tocra and Barce escarpment roads. Between 24th and 27th orders were received to put Nos 2 and 3 Sections' demolitions at readiness state.

Withdrawal orders were eventually received on January 28th allowing the Tocra and the initial part of the Barce escarpment demolitions to be armed. 40 tons of bombs adjacent to the Barce escarpment, were stacked and blown as well as large quantities of Italian mines and ammunition, by Barce hospital, were collected and blown. Also on 28th three captured enemy tanks were destroyed together with one water point, two wells and pumping machinery. Next day (29th) a further 40 tons of bombs by the Barce escarpment were stacked and destroyed. The company's heavy equipment and its B Echelon were sent back to Martuba in 21 Company's care.

On the 30th 18 Company (less half a section with 5 Brigade) was put under 11 Brigade's command and demolitions on the Barce-Derna south road were taken over from a British field company. As already described the very successful Tocra pass demolition, consisting of a ton of gun cotton with tolit and captured aircraft bombs, was blown on 5 Brigade's order, as already described. The same day, on the same road, 300 tons of bombs, prepared by the South Africans, was blown, as well as five culverts charged with aircraft bombs. Nine non-runner tanks were also destroyed.

Over the next two days (January 31st and February 1st) ten rearguard demolitions, often in the face of the enemy, were highly successful as recorded in a comprehensive schedule attached to the company's war diary. First at 0500 on January 1st the Barce escarpment lower road block, which No 3 Section had taken over the previous day, was successfully blown with a ton of gun cotton and aircraft bombs, and the crater sown with 24 anti-tank and 50 anti-personnel mines. Next, at midday, the upper road block was blown but it was only a 40% success as only one of the charges detonated. At a bottleneck in the south road 24 anti-tank and 24 "Carter Mines" were sown (the latter were probably booby traps of a type devised by Lt WG Carter who served with the company in Eritrea, and later with HQ 4 Div Engineers).

No 1 Section, under 2Lt Tyler, was entrusted with the demolition plan along the south road towards Maraua. After making preparations at each site, two man teams were left to fire the demolitions on the orders of 2 Camerons rearguard, which they then joined. During the afternoon and evening three culverts were successfully blown. At a fourth, with no time to check, the result was unknown. Also during the afternoon Tyler and his driver destroyed ten abandoned British lorries and five Italian ones, including two loaded with ammunition. The enemy was delayed sufficiently long to allow 1000 anti-tank mines to be laid in the Maraua area by a section of 4 (Bengal) Field Company which was under command of OC 18 Company.

Next day, February 1st, Tyler's section prepared seven more culverts for demolition and fired them in daylight but only four were successful, due to safety fuse failures with the other three. Another 14 abandoned lorries (two British, the rest Italian) and two large guns were destroyed. During the evening a culvert four miles north of El-Faida was successfully blown, producing a 25ft wide crater, and 300 anti-tank mines were laid either side of the road there. During the night another abandoned British vehicle was destroyed and another culvert, 14 miles north of El-Faida, was blown with partial success.

For No 1 Section's outstanding contribution to the success of 11 Brigade's and the division's withdrawal 2Lt Tyler was awarded the MC. His citation, approved personally by the CinC, General Auckinlech, states:-

"2Lt Tyler was the S&M officer responsible for all last minute demolitions on Jan 31 and Feb 1 on the south road from Barce to El-Faida, along which 11 Infantry Brigade withdrew. From Maraua the withdrawal of the brigade was under pressure and it was frequently the cool judgement of 2Lt Tyler which resulted in impeding the German advance. He appreciated the importance of maximum delay and withheld each of eleven successive road blocks until the last moment, repeatedly in contact and at one place knowing he was likely to be cut off. He set, throughout two arduous days and nights, a fine example of steady determination and competent execution."

The company and the CRE's HQ diaries do not record what No 3 half section were doing but it would seem that they were helping with demolition preparations

on the north (5 Brigade) route. The company diary however shows that No 3 Section was preparing demolitions, on February 1st, north of El-Faida having taken over the charges from British sappers in an "unserviceable condition". In contrast No 2 Section was improving a track south of the Lamluda-Derna road presumably so that Derna should not become a withdrawal bottleneck for the many troops there. The company concentrated during that night east of Carmusa. Next day, February 2nd, they were ordered forward again to mine the track towards Giovanni Berta. On approaching Carmusa they ran into the 11 Brigade battle and, joining as infantry, successfully defended a ridge to the south west of the cross tracks. The company war diary also shows that sapper tasks were not ignored, as a water point was opened, while the battle was in progress in the afternoon. However, when the brigade HQ withdrew the company was not informed and so had to take part in the rearguard action in which two more company vehicles were lost, including the OC's car. Two officers sent to establish contact were not seen again until they rejoined the company at Martuba, during the night, after walking a dozen miles.

The company left Martuba next day (3rd) early in the morning, in a brigade convoy to Tmimi where it again took up a defensive position as part of the divisional box. On the move again, in the evening, over desperately bad country which was in places mined, the nightmare journey ended at 0530 next morning when, to their relief, they sighted a South African Brigade near their destination, on the Acroma plateau. The company diary records - "the men ate and slept for the first time for three days." But the rest was not for long as the company position was machine gunned from the air the next morning. Nos 1 and 2 Sections were sent to the brigade's new position, on the Gazala line, to start work on gun pits and minefields. Company HQ joined them next day, February 6th. A day later the gun pit work was completed and the company's own defence positions were started, also, interestingly, a party was sent to Tobruk to fetch an artillery observation tower, which seemed to suggest the revival of a bygone era. On the 8th gun pit work continued and a second OP tower was brought from Tobruk and, with greater enthusiasm, two compressor trucks.

Over the next four days orders to move were twice followed by counter-orders. Eventually on February 12th the company moved to a new location 13 miles to the west. Next day mining the new position and digging gun pits started and continued for the next week. Thickening up the minefields in front of 5 Brigade had to be done by night. By day enemy tanks were on the prowl creating alarm and crossfire. Their aircraft were also active with their cannon. No 1 Section had a mine lorry hit which blew up leaving only the front axle recognisable. A further extension to the brigade minefield was ordered on 19th and representatives of the relieving British brigade and field company also arrived. Next day 18 Company handed over their works to the field company and their defence position to an infantry company. A quote from 18 Company's war diary shows how much they had been involved as infantry during the past three months: "British divisions evidently do not use their engineers to fight."

After moving back via Acroma and Sherferzen over the next three days to the "Kennel's" Box position. They were once again employed, for the last three days in February, on defence works. However there was a welcome event on 28th when Hav Basappa Salunke and LNK Yesa Kadava returned from a raid with an officer and a ten man patrol of 22/5 Mahrattas and another sapper on an enemy landing ground, having destroyed three German ME 109 fighters and a bomb dump. They had set off in two trucks on February 22nd to raid Martuba airfield sixty miles behind enemy lines. They were unable to attack on the night of the 23rd but lay near the airfield. They crawled on to it only to find one aircraft so they decided to lay up for another day. On the night of 25th they found three new fighters parked and so they fixed charges on them and on the adjacent bomb dump. Four big explosions accounted for the fighters and the bomb dump. At the rendezvous the 2/5 Mahratta Havildar and Spr Ram Chandra Ghag were missing. After leaving food and water behind the rest of the patrol returned without incident to 4 Div's lines. Ten days later the missing havildar and sapper arrived back picking up a CIH sowar who had walked from Benghazi. They had walked the 60 miles back from Martuba with little food and water but arrived clean, shaven and smiling. Hav Basappa Salunke for his actions in the raid was awarded the IDSM.

And so the Second Cyrenaican campaign ended for 18 Company. In spite of being in direct contact with the advancing enemy for much of the withdrawal their IOR strength at the end of February was only three less than it had been at the end of January.

For the first nine days of March the company were mine laying in the Kennel's area. On the 10th this thankfully ceased and minefield records were co-ordinated and datum lines established for additions later if needed. Local leave parties to Cairo, that had started on February 25th, also ended on March 10th. This allowed the company to have a week of individual training, as some 30 reinforcements had arrived from India, helping to replace the sixty or so lost in the early stages of the Crusader operation. However, as usual, as soon as a sapper unit was found to be trying to doing some training, gun pits and other construction works were urgently needed by someone. This was the case during the last four days the company were in the "Kennels" Box area. On March 20th the company moved to the Sollum Box, where they took over the defence works from 2nd SA Div. The construction of concrete water storage tanks was the main task until April 6th when the company commenced mining the railway gap area. However, on April 13th the work was handed over to 2 (Bengal) Field Company of 5 Div. 18 Company, with 11 Brigade, were at last to get some rest and recuperation in the Canal Zone.

21 (RB) Field Company January to April 1942

The company, still under Maj How, was in the Derna area throughout January mainly working on roads and water supplies. Initially one section was with 18 Field Company in Cirene. Enemy air strafing was frequent and the second in command, Capt Forbes, and his driver were shot up and killed on January 3rd.

Capt Fraser was appointed in Forbes' place. A week later the company, short of a section officer, asked for Lt Beart-Foss to be returned from HQ 4 Div Engrs where he was on loan, but it would seem that he remained attached to 4 Div as he is shown in their diaries as doing a reconnaissance at the Tmimi airfield for the CRE in early February; but it may have been in conjunction with 21 Company who were in that area. Maj How was clearly at a loss as to who should be giving him orders and so on his own initiative he visited CRE 4 Div in Barce on January 30th, just as the withdrawal had started. He offered to employ 21 Company on several useful tasks during the division's withdrawal. It was agreed that the CRE should take the company under his wing and integrate it as much as possible with 4 Div's engineers.

The company was tasked to cut the secondary road from Lamluda to the coast and to assist 4 (Bengal) Field Company, with 5 Brigade, in demolitions along the northern withdrawal route which was also to be kept open until no longer required. Demolitions and mines on the Cirene-El Faida line were also suggested. Other tasks to be undertaken included the destruction of enemy tanks and abandoned vehicles, and setting up water points and mines/engineer stores dumps in the division's rear area. The company was also to look after 18 Company's B Echelon (heavy equipment and administrative tail). The company's war diary for February, unlike 18 Company's, is very brief and vague. It only records destruction of gun emplacements at Giovanni Berta, demolition preparations at Ras-el-Halal and the destruction of enemy material in which two of the company were killed and three wounded by an anti-tank mine. There is no doubt that the company undertook or assisted with several of the other tasks suggested. The most likely would seem to be demolition preparations on the northern, 5 Brigade, withdrawal route and the denial of the lateral roads Cirene to El Faida and Lamluda to the coast. The water point at Tmimi was certainly a part of the company's responsibility and probably, from the casualties incurred, an enemy material and mine dump too.

The company diary makes no reference to the 13 Corps order transferring them to the 1st SA Div on arrival at the Gazala line on February 4th. They must have been relieved that they remained under a Royal Bombay Sapper HQ. The diary only records their IOR strength of 228 (probably excluding non-combatants) and that they laid a minefield in the Gabr-el-Abide area between 4 Div and 1st Armoured Div. They must have been even more relieved when on February 21st they rejoined their own 5 Div in support of 29 Brigade which, on return from the far left desert flank of Eighth Army, was in Tobruk having taken over the garrison from 1st SA Div.

The company remained in the Tobruk area with 29 Brigade until the end of March. Their diary only records water supply duties, work on a minefield east of Tobruk and demolitions. On the last day of March the company moved with the brigade to the "Kennels" by El Hamra. There throughout April, they worked on mine laying, digging and water supply points.

Nominal roll of those known to have served with Royal Bombay Sapper and Miner Units during The Second Cyrenaican Campaign.

HQ 4 Div Engrs. August 1941 to April 1942.

CRE Lt Col HP Cavendish DSO OBE* (Dec '40-July '42)
 Acting CsRE Lt Col E Waring (7-26 Dec '41)
 Maj NL Stuart MBE (24 Feb-5 March, 6-18 Apr '41)
 Adjutants Capt DCS David (June-Nov '41)
 Capt L MacI Beattie (Nov '41 -Apr '42)
 Field Engineers & LOs Capt HW Irwin, Lts WG Carter, WJA Murray, JG Danger,
 JK Beart-Foss and Allertini
 Medical Officer (att) Capt HC Rogers IMS

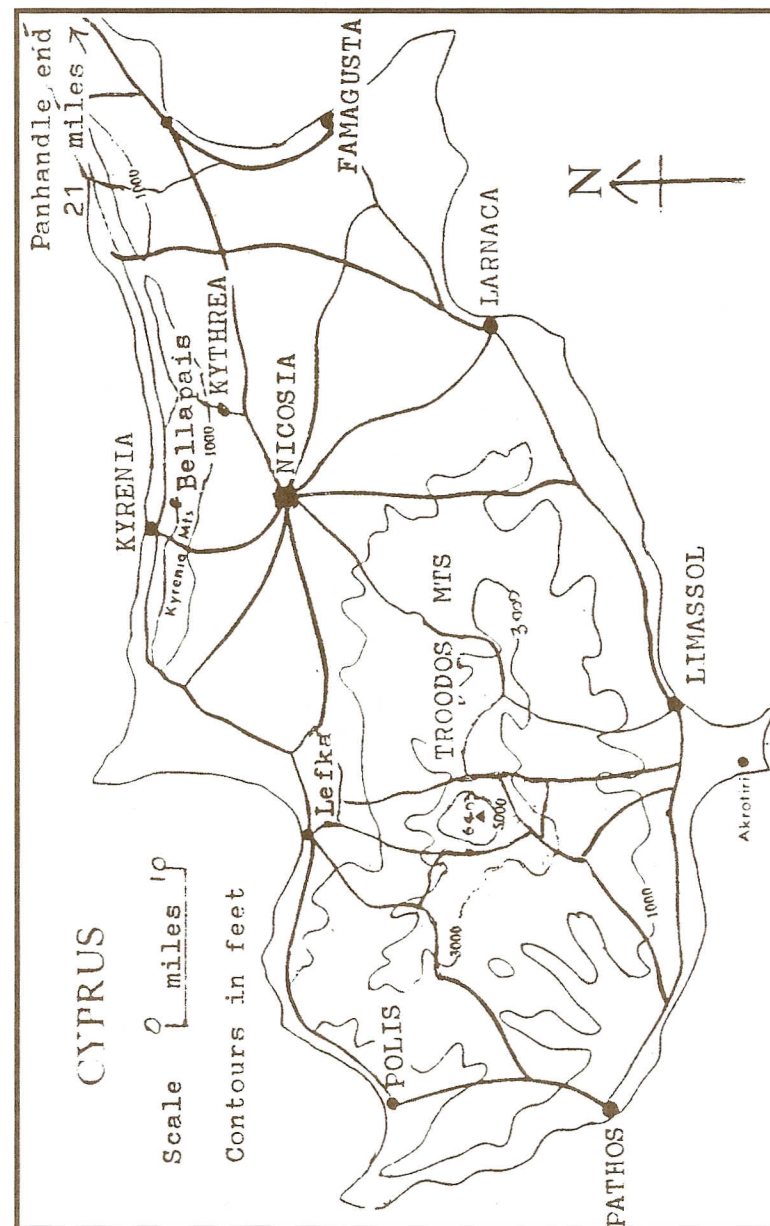
18 (RB) Field Company October 1941 to April 1942

OC Maj NL Stuart MBE* (Dec '40 - Apr '42)
 2ICs Capt BAA Plummer* (May '41 - Apr '42)
 Section Officers Lts RD Penny, EG Cox*, RWSG Tyler MC, JE Jenkins,
 RD Wilsden and Allertini
 Subedar Rehmat Khan IOM*
 Jemadar Maruti Ghorpade*
 Havildar Basappa Salunke IDSM
 Naik Nuv-ul-Haq IDSM
 LNaiks Gharib Singh IDSM, Swaran Singh*, Yesa Kadara
 Sappers Pritram Singh*, Rakha Singh* and Ram Chandra Ghag

21 (RB) Field Company August 1941 - April 1942

OC Maj RWW How* (April '41 - June '42)
 2 ICs Capt S Houghton IARO (Aug '40 - Autumn '41)
 Capt FJN Forbes (Autumn '41 - Jan '42)
 Capt PH Fraser (From Jan '42)
 Section Officers PM Head, D Smythe and JK Beart-Foss
 Subedars Moh'd Hassan and Ananda Jagtap IDSM*
 Jemadars Jagat Singh, Arjum Sakpal, Moh'd Malik, Bostan Khan,
 Mangal Singh*

Note * Mentioned in Despatches



CHAPTER NINE

CYPRUS INTERLUDES

NOVEMBER 1941 TO JANUARY 1943

**HQs 4 and 5 Div Engrs
20 (RB) and 21 (RB) Field Companies**

Compiled by Brigadier DA Barker-Wyatt CBE

This chapter takes up the history of 5 Ind Div (less 29 Brigade and 21 Field Company), following Chapter 7, at the end of October 1941, when its mission in Iraq was completed. Their next rapid move was to Cyprus to help in the defence of the island. HQ 5 Div Engrs with 20 Company remained there until April 1942 when they returned to the Western Desert. 21 Company, which had not gone to Iraq, did not arrive in Cyprus until July 1942. They came, with HQ 4 Div Engrs, after the second Cyrenaican campaign (Chapter 8). CRE 4 Div and his HQ were there for barely a month, but 21 Company stayed until January 1943.

The operational background to the chapter is taken from *Fourth Indian Division* by Lt Col GR Stevens OBE, *Ball of Fire* (5 Ind Div) by Anthony Brett-James and *The Indian Engineers 1939 to 1947* by Lt Col EWC Sandes DSO MC. The war diaries of the Royal Bombay S&M units give some information on their movements and activities on the island but there was little of an operational nature to report. There are no personal memoir contributions.

Operational Situation

After the fall of Greece and Crete in the summer of 1941, Cyprus became an important bastion in the Allied Mediterranean defences. Its loss would probably have resulted in the loss of the Middle East and the war. The island itself was peaceful and its primary military use had been as a lightly garrisoned rest centre with coast and harbour guards. In November 1941 5 Ind Div took over responsibilities for the island's defence, the main threat being airborne attack from Southern Anatolia, as well as from the Dodecanese and Crete. General Auchinleck, the CinC, told the divisional commander (Maj Gen Mayne) that the island must be held at all costs, any withdrawal was out the question; there was to be no repetition of the fiasco in Crete. To bluff enemy intelligence Main Div HQ in Nicosia was called HQ 25 Corps, Rear HQ at Larnaca retaining the divisional title. Four Indian State Forces battalions were brought in to take over static defence, mainly of the landing grounds. The 5 Div brigades were to operate as a mobile defence. 10 Brigade Group were allocated the eastern part of the island, 9 Brigade the south west, and 161 British Brigade, which was under the division's command, the north west. Tank regiments (Skinners Horse and two British) were allocated to each brigade. An all British counter-attack reserve of

one tank regiment, a lorried infantry battalion, a field gun regiment and a sapper field company, all under the Corps commander, was quartered around Nicosia in the centre of the island. (See Map of Middle East page 128)

The brigades and the reserve mobile columns needed to deploy quickly to meet an enemy invasion anywhere on the island, whose length is 140 miles and breadth 60 miles at its centre. Mobility was a key factor but there were few all weather roads, and these were narrow and generally poor. All units lent aid to the sappers to improve them. Local labour gangs were also employed.

For most of the units of 5 Div much of the time was spent on exercises and training. There is no doubt that the island's charm, wine, food and recreational facilities in the mild autumn and spring weather were much enjoyed, in contrast to what was to come in North Africa.

HQ 5 Div Engrs

The CRE Colonel AHG Napier and his staff arrived in Cyprus from Egypt by destroyer on November 3rd. At first appointed CRE Troops Cyprus, with his headquarters in Larnaca on the southern coast, he soon moved it to Nicosia to become HQ 25 Corps Engineers. As Chief Engineer for the island the CRE and his staff were worked hard. During the first month all divisional units were busily engaged in making their defensive arrangements. With sapper advice and some supervision they built their command posts and signal offices, dispersed or resited dumps and improved camouflage. The engineer units available to the CRE were 2 (Bengal) and 20 (RB) Field Companies, 44 (Madras) Field Park Company and two British field companies. As well as the urgent need for road works, plans also had to be made for demolitions to prevent, in the last resort, use of installations by the enemy, in particular runways/landing grounds, harbours, jetties, port facilities and blocks on the vital roads through the Kyrenia range on the north coast. Minefields were also laid and plans made for the destruction of the dumps.

It was, as usual, a busy time for sappers but time off was taken for Christmas festivities and New Year's day when additional awards for the Eritrean campaign were announced. Those for the divisional Royal Bombay sappers were the OBE for the CRE and the IDSM for 20 Company's Hav Said Akbar. Engineer work continued in the new year as well as divisional exercises in which the CRE's HQ was inevitably involved. The January, February and March rains, adding to the mobility problems, also increased their work load. Nevertheless service on the island was idyllic, by comparison with that in the Western Desert where they knew, from a February warning order, they would have to return at the beginning of April.

20 (RB) Field Company

20 Company (Maj Winchester) after returning to Egypt from Iraq in October 1941 spent two weeks in the Canal Zone re-equipping and training before moving, with 9 Brigade (Brig Fletcher), to Cyprus in early November. While in the Canal Zone Sub Daulatrao Chaugle, who had been mentioned in dispatches for his services to the company in Eritrea, returned to India after handing over to Sub Harnam Singh. Jemadar Laciman Singh was also replaced by Jem Faiz Ahmed.

The company moved with 9 Brigade to Cyprus via Haifa and Famagusta during the first week of November. By the 7th the company was stationed alongside HQ 9 Brigade in Limassol, the principal town in the south western part of the island. The immediate task was to reconnoitre the roads, harbours, jetties and the defences of the landing grounds in the brigade area. With the section officers and jemadars away on these tasks the rest of the company was hard at work producing camp structures for the units of the brigade. This work, for which there was also a detachment at Paphos at the south western part of the island, continued to Christmas. The company concentrated for the festive season at Limassol and were able to relax a little as apparent in a group photograph of the five officers and four VCOs taken on Christmas day (also Goru Gobuid Singh's birthday). Hav Said Akbar's IDSM was celebrated too. In the new year of 1942 the company were mainly employed on defence works and some individual and section training was achieved. The works and training continued to the end of March and included brigade defence exercises. On April 3rd the company was relieved by 12 (Madras) Field Company of 4 Div. Four days later the company embarked at Famagusta and disembarked at Alexandria the next day, for onward movement to the Western Desert.

4 Indian Division and HQ 4 Div Engrs

At the end of the Second Cyrenaican Campaign 4 Div, in the Sollum area near the Libyan frontier, was relieved by 5 Div. Much to the annoyance of 4 Div, particularly the GOC (Maj Gen Tucker), its brigades were dispersed. 5 Brigade with 4 (Bengal) Field Company was sent to Palestine to work on defences, 11 Brigade with 18 (RB) Field Company moved to the Canal Zone to train in combined operations and only 5 Brigade with 12 (Madras) Field Company were sent to Cyprus. The CRE accompanied the GOC to Cyprus for a ten day visit at the end of April. His HQ remained in the Canal Zone with Maj Stuart once again as acting CRE. With fewer brigades and units than had been available to 5 Div, more concentration at the centre of the island was necessary. It was also decided to prepare the Troodos mountain block as a "keep" defence to withstand a siege. The Cyprus American mining company built some of the roads down from it to the coasts and central plain as their contribution to the war effort.

During May the adjutant 4 Div Engrs, Capt Beattie, was posted to GHQ Cairo and was replaced by Capt Plummer from 18 Company. After an "unknown

destination" warning order, 18 Company was eventually told on May 20th to move back to the Western Desert under 11 Brigade's command. On May 30th the CRE's HQ moved from Kabrit to Beni Yusef where it remained until mid July. Also at the end of May the CRE visited Cyprus again. Throughout June there were conferences and exercises. Training directives were also issued to the companies but probably never reached 18 Company who, from 16th, were out of touch and fighting to try and save Tobruk. Tragically the port fell to the enemy on June 21st; the company with over a division's worth of other arms, becoming prisoners of war (see Chapter 10).

On June 21st Lt Col Blundell arrived to take over as CRE from Lt Col Cavendish who was posted back to Kirkee to be commandant of the RBS&M HQ & Depot. Both he and Blundell left for Cyprus on June 23rd. They must have anticipated an order to stand by for operations on June 30th. The GOC and senior staff left for the island the next day (July 1st). However, both Cavendish and Blundell returned to their headquarters at Beni Yusef camp, Cavendish leaving for India on July 3rd. HQ 4 Div Engrs arrived in Athalasa Camp Nicosia (still HQ 25 Corps) via Port Said and Famagusta on the 16th. The most immediate tasks being the review of all demolition and all minefield plans. 21 (RB) Field Company arrived in the island four days later and moved to Limassol.

For the month the CRE's headquarters spent in Cyprus, conferences and visits to units are the only events recorded in the war diary. On August 21st HQ 10 Ind Div engineers took over the engineer responsibilities on the island and HQ 4 Div Engrs, after a night's camping on the beach near Famagusta, departed for Mena Camp Cairo, via Haifa and Gaza, where they remained until early September before going back to the Western Desert.

21 (RB) Field Company

Chapter 8 left 21 Company in the Western Desert, in April 1942, serving in the El Hamra/Kennels area with 29 Brigade of their parent 5 Ind Div. Chapter 10 continues their history in the El Adem Box and Sidi Rezegh area during Rommel's offensive in June and their withdrawal first into fortress B in the Bagush area and then out of battle to the Delta during the first days of July.

After absorbing 34 jawan reinforcements, and starting their training, the company was ordered to hand over twelve vehicles to 20 (RB) Field Company and move to Cyprus. On July 17th Maj Eagan took over from Maj How and the company arrived in Limassol on 19th. Reorganisation and training continued until August 12th when the company moved to the lovely Kyrenian hills and into the old monastical and picturesque village of Bellapais, looking down towards some of the delightful bathing beaches of the north coast. To add to the company's pleasure was the announcement of awards of the MC to Lt Beart-Foss and the IDSM to Spr Shankar Bhore. Their citations have not been found but it would seem that the awards were for actions during the second Cyrenacian campaign.

The Eighth Army's retreat in the summer to El Alamein, just 40 miles west of Alexandria, increased the threat to Cyprus. With the Royal Navy very active in the sea areas south of the island, enemy seaborne landings on the excellent but remote north coast seemed more likely. It was to help counter this threat that 21 Company was sent there. The first task was to improve the access tracks particularly in the Kythrea region and then plan and prepare blocks in the passes through the coastal mountain range. This work continued through until early autumn but in November the threat of an enemy invasion of Cyprus was greatly reduced, with the Axis forces in full retreat, after the Eighth Army's victory at El Alamein. Thereafter training for the advance westwards in North Africa became the company's main priority. Bridging training included exercises with the SBG equipment bridge. In December No 1 Section gave a demonstration to the other arms of the Eighth Army's method of breaching minefields which had led to the army's success at El Alamein. The Deputy Engineer in Chief Middle East (Brig BK Young), who had been a Bombay sapper, visited the company in December. Christmas and the New Year were passed in peace and plenty but, with reinforcements going to other units, the company strength was down to 220 all ranks, with only three VCOs and a shortage of senior NCOs. By then their days in Cyprus were numbered and on January 20th the company embarked at Famagusta for the Canal Zone, via Haifa and Gaza. At the Middle East School of Military Engineering the company trained particularly in wet gap bridging. Training and NCO cadre classes continued for the next five weeks and with reinforcements from India the company's strength was brought up to 255 all ranks by the end of February 1943.

Nominal Roll of those known to have served with RBS&M units in Cyprus

HQ 4 Div Engrs	July to August 1942
CRE	Lt Col JH Blundell
Adjutant	Capt BAA Plummer
Field Engrs	Capt RD Penny and Capt HW Irwin

HQ 5 Div Engrs	November 1941 to April 1942
CRE	Lt Col AJH Napier OBE
Adjutant	Capt A Selkirk
Subalterns	Lt AE Scott and Lt TRH Stubbs

20 (RB) Field Company	November 1941 to April 1942
OC	Maj JC Winchester
2IC	Capt PP Miles
Section Officers	Lts ET Abbot, HM Boardman and PCM Mills
Subedar	Harnam Singh.
Jemadars	Faiz Ahmed, Autar Singh and Ketkai
Havildar	Said Akbar IDSM

21 (RB) Field Company	July 1942 to January 1943
OC	Maj RH Eagan
2IC	Capt PH Fraser
Section Officers	Lts JK Beart-Foss MC, HJ Colter and NT Trayler
CHM	Sadig Shah
Havildars	Moh'd Riaz and Moh'd Illahi LHav Barkat Ali
Sapper	Shankar Bhore IDSM

CHAPTER TEN

GAZALA TO ALAMEIN TO TUNIS

APRIL 1942 TO May 1943

HQ 4th and 5th Indian Divisions Engineers 18 (RB), 20 (RB) and 21 (RB) Field Companies

Compiled by Brigadier DA Barker-Wyatt CBE

This chapter continues the history of the North African campaigns from Chapter 8, in mid-April 1942, when the Eighth Army was holding a line west of Tobruk from Gazala southwards. The narrative covers withdrawal to El Alamein. The fall of Tobruk, the Alamein defence and attack and victorious advance to Tunis, driving the Axis powers out of North Africa in May 1943.

The background material for the chapter is mainly taken from the histories of 4 and 5 Ind Divs, already acknowledged in other chapters. The war diaries for HQ 4 and 5 Div Engrs and 18, 20 and 21 Companies have provided most of the information regarding their movements and actions. Capt DS Orchard's memoirs of the final actions in Tunisia provide a most valuable direct link with events.

Cauldron battles and withdrawal to Matruh line

The 5th Indian Division (now under Maj Gen Briggs) which had been in Cyprus (less 29 Brigade) replaced the 4th Indian Division in the Western Desert in April 1942. The divisional HQ with 10 and 29 Brigades were in reserve and guarding the airfields, Army HQ and rear areas around Gambut and El Gubi. 9 Brigade was with 2nd South African Div manning the Tobruk perimeter which would be the enemy's next major objective.

Rommel had by early April restored Benghazi harbour and by the end of May built up supplies in his forward areas confronting the Gazala line. On May 27th the enemy struck around the southern flank and advanced to Trigh Cappuzzo where they were held pinned against the rear of the Gazala minefields in the area later known as the "Cauldron". But by the 31st Rommel had cleared two corridor supply routes through the minefields on either side of Sidi Muftah and overran the British Brigade there. The 8th Army's intention was to form two boxes opposite the two minefield gaps, but there were changes of plan and delays. 5 Ind Div was eventually ordered to do this with their 9th and 10th Brigades, (the former being called from Tobruk) and with 22 Armoured Brigade.

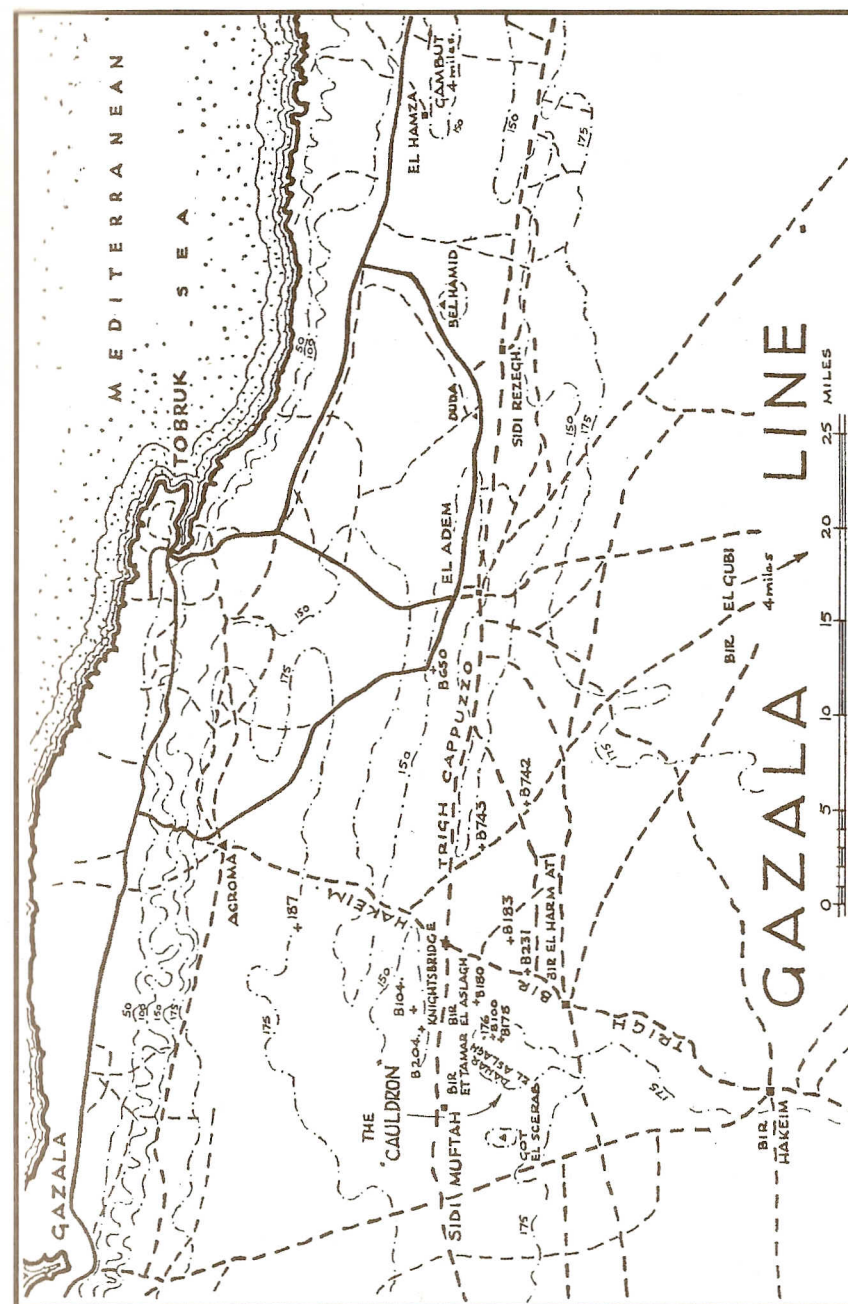
Operation "Aberdeen" was belatedly launched on June 5th. 10 Brigade (Brig Boucher) achieved the first phase objectives, Bir el Tamar and Dahar el Aslagh, early in the morning, but the second phase 9 Brigade (Brig Fletcher) ran into the German counter-attack and 22 Armoured Brigade to the north were unable to help. The Cauldron battle raged throughout the day with heavy losses in tanks, guns and men of 5 Div also 2 and 22 Armoured Brigades. There was a stampede withdrawal of most HQs and units in the area during the evening and night. (There is a vivid account of this, mainly quoting the CRE, Lt Col Napier, in *Ball of Fire* by Anthony Brett-James.) 29 Brigade had remained deployed round the El Adem base 25 miles back east and it was there that most of 5 Div eventually rallied by the morning of June 6th. Apart from 10 Brigade who continued the fight from their initial objectives, but were almost annihilated next day.

From El Adem, for the next week, 29 Brigade operated mobile columns harrying the enemy LoFC around Bir Hakeim which the French garrison evacuated on June 10th. Two days later 29 Brigade concentrated in the El Adem box. The remnants of 9 and 10 Brigades had already withdrawn to the El Hamra/Halfaya pass area. The enemy first assaulted the El Adem box on June 12th but were driven back with RAF help. To save Tobruk from encirclement the remaining part of the Gazala line was evacuated and a defence line from Acroma to El Adem was formed with isolated battalion boxes at B187 (SW of Acroma) and B650 (NW of El Adem). Under continual attack by enemy armour and air, the 1st Worcesters' garrison at B187 was skilfully, but with heavy casualties, withdrawn into Tobruk on June 16th, but 3/12 FFR at B650 was overcome and captured. The withdrawal of the remainder of 29 Brigade from El Adem to join the rest of 5 Div at El Hamra was successfully achieved on night 16/17 June by small parties walking out, from 0200, a dozen miles to an RV with 7 Armoured Div. A detachment of sappers remained behind to start demolitions an hour later so as not to prejudice the withdrawal.

5 Div handed over the defence of El Hamra on 18th to the South Africans and went back into reserve at Sofafi with the remnants of 9 and 10 Brigades and 1st and 2nd Free French Brigades. Divisional HQ was set up in Bagush on June 19th and was joined by 29 Brigade three days later.

HQ 5 Div Engineers - April to 20th June 1942

The CRE (Lt Col Napier) HQ had taken over works in the Sollum area from CRE 4 Div on April 19th. The same day he visited 21 (RB) Field Company who had remained with the Eighth Army while the division, less 29 Brigade, had been in Cyprus. 21 Company now joined 2 (Bengal) and 20 (RB) Field Company and 44 (Madras) Field Park Company under the CRE's command all being located in the Sollum Box. On May 1st the sapper units were visited by HRH Duke of Gloucester. Two days later the HQ moved with Advance Div HQ to El Hamra for a training exercise. On May 17th the CRE's HQ moved again with Advance Div HQ to a



point in the desert approximately 35 miles south-east of Tobruk but there was little warning of the momentous events which would start ten days later.

The Knightsbridge battle is emphasised in the HQ Engrs war diary for June, as is the gap in the minefield further west opened by the enemy for his supplies. Apparently in efforts to try and close it a jemadar and 14 IORs (Company not stated) were blown up when two lorry loads of mines exploded on 31st. Next day Div HQ was still under the impression that the enemy was withdrawing. The HQ moved on the 3rd, after being bombed, and remained mobile at instant readiness. A June 5th entry in war diary records a demand by 9 and 10 Brigades each for 24,000 anti tank mines but transport was unavailable. Later in the day Main Div HQ including HQ Engrs withdrew to Rear Div HQ. The staff vehicles leading the way being blown up in our own minefields, as mentioned earlier in the chapter. However, two bulldozers which had been with 10 Brigade had apparently been safely recovered earlier. Prior to the withdrawal of 9 and 10 Brigades to Halfaya Pass area on June 9th, there were encouraging reports from the divisional field companies (see below). Two days later 21 Company was put under command of 5 Div CRE with orders to them and 2 (Bengal) Company to double the density of the minefields adjacent to the Kennels Box/Halfaya area and to remain there until the 20th to complete the work. By then the HQ was moving back to Bagush.

20 (RB) Field Company - April, May, June 1942

20 Company (Maj Winchester) arrived in the desert from Cyprus with 9 Brigade in mid April 1942 and for the rest of the month and the first half of May worked on the Halfaya defences and on water supply tasks. On May 17th the company moved again with 9 Brigade (Brig Fletcher) to Tobruk for defence works. When Rommel attacked in the south on 27th May they were ordered to close all gaps in the Tobruk perimeter.

From 30th the company was at two hours notice to move but it was not until June 4th that they did so, with 9 Brigade, to the Knightsbridge area. On the 5th the brigade advanced against the enemy in the "Cauldron" at first light. No 1 Section, under Lt Mills, was with 2nd West Yorks whose attack, mounted in a great hurry, was repulsed. The section was skilfully extracted by Lt Mills but four men were lost. Later in the day Mills was missing, believed to have been captured. Lt Boardman leading his No 3 Section was killed by enemy anti-tank fire. On the 6th the Mahratta section was isolated in the Bir Aslagh area but Jem Bacharan Jadhau managed to withdraw them with few casualties and they escaped north to Tobruk. For his outstanding leadership he was awarded the IDSM.

With the remnants of 9 Brigade, the remainder of 20 Company were ordered back to Box 650 west of El Adem. Nos 1 and 2 Sections started laying mines there on the 6th, continuing on the 7th and 8th, when they were dive bombed, losing three men killed and five wounded. Handing over sapper responsibilities in

Box 650 to 21 Company, who were in El Adem, 20 Company, on June 9th, moved 20 miles north-west to Box 187 where 1 Worcesters were digging in. There they worked continuously through the night laying mines under command of CRE 1st Armoured Div. In spite of the drastic emergency situation there was no slackness in completing inner and outer perimeter fences and minefield records. The work continued until the 12th when enemy tanks attacked from the east. Leaving No 2 Section at B 187 in the care of CRE 2 SA Div, the rest of the company retired with 1 Arm'd Div to Tobruk. The OC there met OC 18 (RB) Field Company to arrange the care of any 20 Company stragglers arriving in Tobruk. On 15th a naik and five sappers rejoined the company from Box 187. The box had been overrun by tanks the previous afternoon.

Later on the 15th the company moved back to the Halfaya pass/Kennels area. CRE 5 Div was located and yet more mines were laid. On 20th there was a fourth move back to Sofafi and on to Bagush on 21st. There the company rested and refitted for three days.

21 (RB) Field Company - April, May, June 1942

21 Company who had been in Second Cyrenaican campaign (Chapter 8) mainly with 4 Ind Div, had rejoined 5 Div and were with 29 Brigade (Brig Reid) in the Kennels Box (El Hamra area) throughout April, minelaying, digging and, inevitably, on water supply tasks. For the first half of May they were allowed time for training but on 17th moved, with 29 Brigade, to Capuzzo, and then on to El Gubi 25 miles south of El Adem and 40 miles south of Tobruk. There they set to work on defences for a brigade box, mainly minelaying at a density of one per yard of front in front of the battalion positions and one per two yards of front between positions.

On May 29th, two days after the start of Rommel's offensive the El Gubi Box was abandoned and the company moved, with 29 Brigade, to the El Adem Box and the Sidi Rezegh area. There they spent the first eleven days of June digging, mining and clearing fields of fire. To help them two compressor trucks were transferred from 2 (Bengal) Company. As well as their defence works tasks the company sent out nightly parties to destroy abandoned enemy tanks in the desert to the south west. On the night of June 1st they destroyed 25 enemy tanks (including five of the powerful Mark Vs). Running out of explosive, six more were destroyed by shell fire. It was found that 5lbs of primed plastic explosive placed on the tank transmission, with all openings closed, blew the turret off and burnt out the tank.

On June 12th the enemy encircled the El Adem box and for the next four days frequent "stand to" in the trenches interrupted work on gun pits. By the 17th thirteen men were missing from the company and there were three wounded. Evacuation of the box by small parties, on foot to a transport RV a dozen miles away, was ordered. The company was required to leave a demolition party to

destroy material at the end of the evacuation, so as not to alert the enemy. The demolition party must have included the OC (Maj How) and 22 men as they were not seen again. Over the next three days the company moved with the remnants of 29 Brigade back to Sofaffi and then to Bagush. There the CRE brought newly promoted Maj PP Miles (from 20 Company) to take command. Over the next two days the company rested and was refurbished with some engineer and personal equipment, including rifles.

The Fall of Tobruk - 20/21 June 1942

The need to reinforce the 8th Army in Cyrenaica had been to some extent appreciated before Rommel attacked on May 27th. 11 Brigade (Brig Anderson) of 4 Ind Div was sent forward from the Canal Zone to Tobruk where they relieved 20 Indian Brigade on May 25th and passed under command of 2 South African Division. In addition to defensive duties the brigade was expected to provide three columns of infantry and gunners to operate in a mobile role outside Tobruk. It was not until June 17th that the garrison was isolated. On 18th a strong enemy column was approaching from the east. At first light on the 20th the perimeter was attacked and the town dive-bombed and shelled. The main attack fell on 11 Brigade in the eastern sector. Due to late and piecemeal arrival of supporting armour, counter-attacks failed and the German panzers broke through to the coast behind the brigade in the afternoon. Organised resistance continued into the night until the early hours of June 21st. At 0400 Maj Gen Kloppe, the garrison commander, who had been ordered by the army commander to hang on and not attempt a break out, had only one hour's worth of artillery ammunition left. By then it was too late to organise a breakout so he decided to surrender to avoid unnecessary bloodshed. However, elements of 11 Brigade fought on and tried to escape but only a few were successful.

18 (RB) Field Company - Last days

The company had moved back, after the second Cyrenaican campaign, to much needed rest and recuperation in the Canal Zone in mid-April 1942. For the next five weeks the company achieved a comprehensive training programme particularly in bridging and rafting. Infantry and trade training was not neglected. The company even managed to hold a two day Indian Army 3rd class certificate of education exam. Early in May Capt Tyler took over from Capt Plummer as company 2IC. On May 20th Maj Stuart handed over the company to Major Thomas who had been 2IC 4 (Bengal) Field Company, Lt Penny leaving 18 Company to join 4 Company as 2IC.

In addition to these changes the company's operational plans were in flux. The day before Maj Thomas became OC the company had been ordered to prepare for a sea move to an unknown destination. Next day the order was cancelled and replaced by a warning for an unspecified road move. This was confirmed early the following day (2nd) as a road/rail move with 11 Brigade to Sollum. The same day,

while loading up, the company were visited by the CinC. General Auchinleck, and FinC, Maj Gen Hughes. By the 26th the company was with 11 Brigade in Sollum, just as a state of emergency was being ordered to prepare for an enemy airborne troops attack. With a full moon, night sentries were doubled and for the next four days the company was digging slit trenches and weapon pits, within the box, and gun positions on the escarpment, to enable a field gun regiment to fire out to sea. There was also a gas attack threat, and gas capes were issued and drills practised.

In spite of the uncertainty of threats, plans, roles and movements, morale within the company was good. The war diary records great amusement and enjoyment in a company obstacle race won by No 2 Section. Next day, May 31st, the company was again at short notice to move. Here the diary ends and no diary for June has survived. However there is no doubt that the company moved with 11 Brigade to Tobruk in early June. The only information about their activities from engineer sources is the meeting in Tobruk of their OC (Maj Thomas) with the OC 20 Company (Maj Winchester) on June 14th, to arrange the care of the latter's stragglers.

From Anthony Brett-James's *Ball of Fire* it seems that 18 Company was captured in the afternoon of June 20th, when the German panzers broke through to the coast. He also states that "before surrendering the company had destroyed their vehicles, several of which were loaded with anti tank mines. A number of Germans, in to salve or loot, were blown to pieces as they exploded."

It was a tragic end to an old and famous company who by June 1942 had been in the Middle East for nearly three years and fought the enemy at close quarters without any appreciable break in four successive campaigns; the First Cyrenaican in December 1940 followed by Eritrea, in the Spring of 1941, where they had been in the drawn out Keren gorge battle longer than any other unit, the main Syrian (Damascus) campaign, in the Summer of 1941, in which the company had been the only Indian engineer unit, and lastly the Second Cyrenaican campaign, over the winter of 1940/41, where they had been continually in close contact with the enemy. As well as their engineer achievements they had fought with distinction, on several occasions, in an infantry role. An attempt was made, with the active support of Maj Gen Tucker, to re-form the company. The attempt rightly failed because the expansion of the Indian Engineers was proceeding so rapidly that every available veteran was needed at home. However, in the reorganisation of the Group after the war, 28 (RB) Field Company, which had seen service in Arakan and the Far East, was renamed as 18 (RB) Field Company to carry forward its long history and tradition since first formed in 1777.

There is no record of any names of those who were with the company in Tobruk except for the OC, Maj NB Thomas MC and Capt RWSt G Tyler MC. There is an unsolved mystery regarding Captain Tyler's award of a bar to his MC, which was published in the London Gazette in March 1945, but the citation cannot be traced. However, as the first MC was awarded for his leadership and courage in

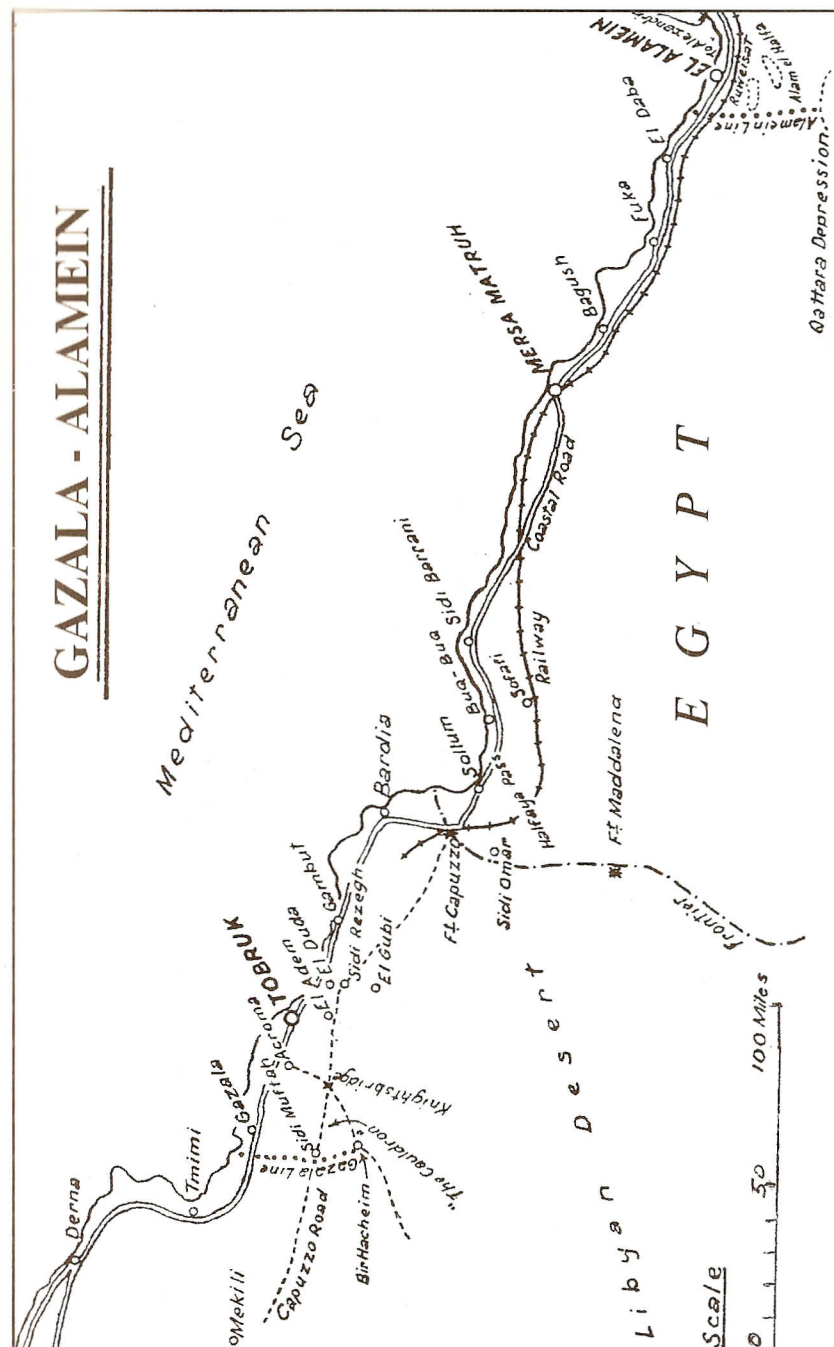
February 1942, during the retreat from Benghazi, the bar can only have been awarded for his actions in Tobruk or subsequent actions, but there is no record of him returning to a RBS&M unit. The most likely explanation is that the award was for action in Tobruk. The recommendation probably being initiated by Maj Thomas and Brig Anderson in 1944 or 1945, after they had escaped or been released from a POW camp in Italy.

Mersa Matruh to Alamein - 20th to 30th June 1942

When Tobruk was lost on June 21st the rest of the 8th Army was falling back on the defence line between Mersa Matruh and Bagush where they had been a year earlier. In command there was 10 Corps which had just arrived from Syria with 10 Ind Div and the New Zealand Div. They were ordered to hold line with the remnants of 1st Armoured, 50th British and 5 Ind Divs. The latter, with the New Zealanders, were south of Matruh in the Sidi Hamza area and the south of the road to Siwa with the task of delaying the enemy west of the road.

On June 25th General Auchinleck assumed personal command of the 8th Army from Ritchie and 30 Corps was ordered to prepare a final line of defence bastions between the Qattara depression and El Alamein on the coast, 100 miles to the rear of 10 Corps' Mersa Matruh line.

The weak link in the Matruh line was a 7 mile gap between the deep minefield which ran from the coast for about 8 miles inland and the minefields on the high ground in the Sidi Hamza area 15 miles south of Matruh. It was the gap that 29 Brigade was ordered to defend with all speed on June 24th. The same day HQ 10 Corps signalled 5 Div that 10,000 anti-tank mines were being sent to close the gap between the minefields. The CRE requested 8th Army's minefield records (it seems unlikely they were ever received). On 25th it was confirmed by Corps, after the GOC questioned the policy, that the seven mile gap in the minefields, which was on the enemy line of advance, was to be sealed as soon as possible. The CRE advised that time and manpower would preclude minefield marking but three safe lanes were to be "posted". They would be closed after the withdrawal of covering parties. The work which started on the night of 25th was divided between 20 and 21 Companies and a New Zealand Field Company. 20 Company working on the most likely enemy approach was provided with an infantry platoon for local protection. The companies worked all night and day completing their tasks at 2300 the following night, the "posted" safe lanes being closed after the 29 Brigade columns had withdrawn through them. 20 Company continued this work though the night. The enemy had made no contact during the 26th until the evening when several German tanks, preceded by a lorry, approached. The lorry blew up on a mine, and the tanks withdrew at speed. Next day in the afternoon, after bombarding 29 Brigade's position behind the minefields, about 100 enemy tanks, with their engineers riding on them, to deal with mines, broke through at 1900. The Germans did lose tanks and many vehicles on the mines but it only took them about thirty minutes to penetrate the minefields



with infantry following the tanks. It was a classic example of minefields inadequately covered by fire. 29 Brigade, after spiking what few guns they had, withdrew at 2000, by bounds, to hold a rearguard position at Fuka to cover the main withdrawal of 10 and 13 Corps.

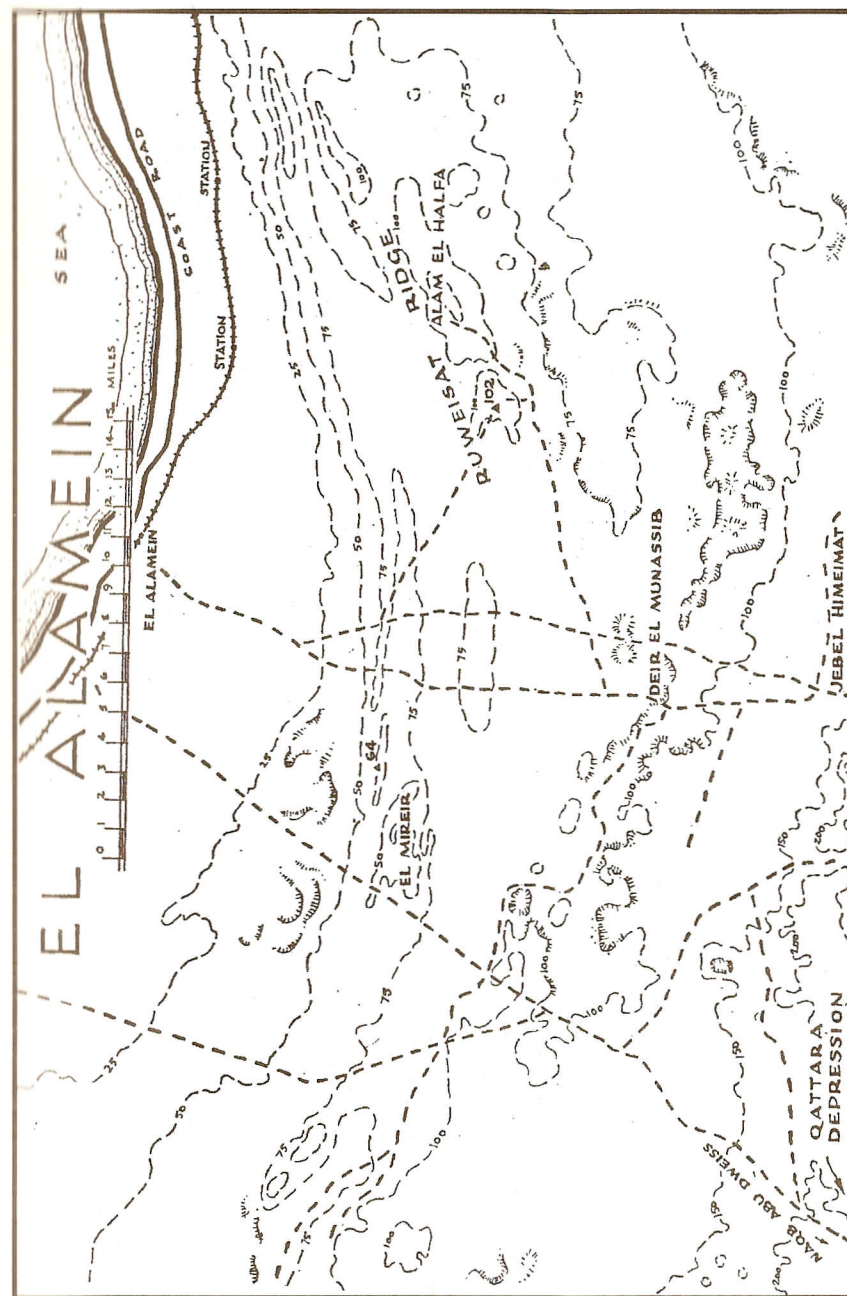
The brigade had asked for 21 Company to stay with them. The company, on reaching the Fuka delaying position during the night, under dive bombing, started digging in. But they were without their new OC (Maj Miles) and Lt Hobson. Both were missing. Next day (28th) the sections continued digging while the remaining company officers accompanied brigade columns for enemy tank destruction. At 1930 that day the enemy launched a surprise attack, the company suffering 21 casualties. Brigade HQ was overrun. Brig Reid, most of his staff, and probably Maj Mills of 21 Company, were taken prisoner, so joining Brig Boucher and many of his 10th Brigade captured in the cauldron battle.

21 Company escaped capture but were dive bombed next day, as they moved south to Fortress B in the Qattara depression, suffering five more personnel casualties (two killed) and the loss of several vehicles. The company reached Fortress B the following day, the 30th, where they found the CRE, his HQ and 20 Company.

20 Company sections also returned to their Hamza sector of the Mersa Matruh minefields, on the night 26/27 June, to thicken the density to one mine per yard of front. However, unlike the previous 24 hours, they had to provide their own local protection but with orders to cease work if the enemy broke through. At 1930 they came under shell fire and with reports that the enemy had broken through returned to company HQ. There they were dive-bombed before withdrawing to Div Rear HQ south east of Fuka on 27th, as did the remnant of 21 Company after the loss of much of 29 Brigade in their delaying stand west of Fuka on 28th.

Meanwhile Div Main HQ, with Engrs HQ, in danger of being left behind had to withdraw across the desert on the 28th. The CRE recced a route and then led Div Main HQ along it making contact with 1st Armoured Div. No doubt the CRE's guidance was ordered by the GOC to ensure that there should be no reoccurrence of the chaotic withdrawal from the Cauldron battle. Div Rear HQ also made a similar move on 28th across the desert with the CRE's adjutant (Capt Potts) navigating and avoiding enemy action on both sides of the route. Early next day, having noted enemy positions from their gunfire during the night, Div Rear HQ moved on a bearing of 174° for 23 miles, led again by Capt Potts.

The same day the CRE left Div Main HQ and proceeded with 20 Company to Fortress B at the southern end of the Alamein defence line now taking shape. Arriving there at nightfall 20 Company with 2 (Bengal) Company started early the next morning laying mines again, this time for 9 Brigade. 6,000 anti-tank mines



were collected and delivered by 20 Company and 44 (Madras) Field Park Company from the engineer dump at El Alamein.

The same day, June 30th, the CRE was instructed that, due to shortages of water, food and supplies at Fortress B, all 5 Div sapper units there were to move, on completion of the minefield, to Amariya, the base area for the Western Desert. This welcome news spurred the rapid completion of the minefield by 1330 hrs. Over the next two days, July 1st and 2nd, all the 5 Div sapper units arrived at Khatatba base camp for rest and refitting. Maj Miles who had only commanded 21 Company for five days was still missing, last seen with Brig Reid at Fuka; Lt Hobson was also still missing. With Lt Beart-Foss, injured in the dive bombing on June 29th, in hospital and Captain Fraser also in hospital, 21 Company was in effect leaderless. The company had also lost 66% of its IOR strength. To restore stability the CRE appointed Maj Winchester to take temporary command. Capt Abbott, 2IC 20 Company, acting as OC 20 Company.

All the divisional engineers spent the next seven days resting, refitting and catching up with administration - casualty lists and other documentation. It is also recorded that they did some training, especially with their newly joining reinforcements. It would seem that Maj Winchester must have recommended a longer recuperation for 21 Company, even though (and because) they had been reinforced with 50 IORs bringing them up to about two thirds of full establishment strength. On July 7th the company was warned to move to Cyprus to take over the role of 2 (Bengal) Field Company. Three days later (the 10th) 21 Company handed over twelve of their vehicles to 20 Company who were ordered back to the Alamein front. Major Winchester returned to 20 Company leaving 21 Company in the care of their 2IC Capt Fraser who had arrived back from hospital, bringing a further 34 IOR reinforcements with him. On July 17th 21 Company entrained for the Canal Zone, where a new OC, Maj Eagan joined them, before going on to Haifa and disembarking in Cyprus on the 19th.

Ruweisat Ridge & 1st Battle of Alamein (July to Sep 1942)

Throughout July formations, which had retired piecemeal to the Alamein line, were split up further and formed into columns and groups whose composition was continually changing. The 5 Div units which had been the more severely mauled in the retreat were taken out of battle and rested for up to a couple of weeks, but 5 Div continued to supply up to three columns operating in mobile harassing roles. On July 10th the Australian and South African Divs, concentrated by the coast, gained and held ground which, due to lack of reserves, could not be exploited. Nevertheless, it was an important salient which threatened Rommel's position further south.

With 5 Div units somewhat split up and scattered and, without a delineated divisional area, there was no overall defensive plan upon which the divisional sappers could assist. The CRE (Lt Col Napier) was therefore sent by the GOC (Maj Gen Briggs) to 30 and 13 Corps HQs for orders on July 9th. The latter tasked

him to help the New Zealand Div build defences in the Alam el Halfa/Khadim area. Accordingly next day (10th) Maj Winchester, with his 20 Company, 2 (Bengal) Field Company and a detachment of 44 (Madras) Field Park Company, moved to Alam el Halfa/Khadim to lay mines. By July 14th they had laid 11,000 anti-tank mines, with minefield perimeter marking, covering the New Zealanders eastern position. 20 Company, with their compressors, also helped the infantry dig their rocky positions. The company also reconnoitred for water supplies and reconditioned a cistern at Bir Sultmain. The sapper companies had been short of tools and equipment, but the CRE, with his RSM, was able to "liberate sufficient for practical purposes" from the Burgh el Arab stores base, for RSM Coinger to allocate to the companies at their work sites.

With preparations complete on July 14th, the New Zealand Div and 4 Ind Div's 5 Brigade, now under 5 Div, attacked the Ruweisat Ridge, a long narrow 200ft high feature which ran west to east into the centre of the 8th Army position. The New Zealanders, who had had many casualties, were forced to withdraw from the western end of the ridge, but 5 Brigade, at the eastern end of the ridge, were able to hold on for three days. Then a 9 Brigade battalion (2 West Yorks) passed through them and attacked westwards along, the ridge on the 17th, to capture Point 63. It was impossible to dig in, as the ridge there was formed of rock slabs, so sangars had to be built at last light. Later in the evening German tanks counter attacked but did not press it to a conclusion, withdrawing and leaguering about 1000 yards to the north.

20 Company had moved forward to rejoin 9 Brigade on the Ruweisat Ridge on the 17th, having handed over their Alam el Halfa positions and minefield duties to 295 (British) Field Company the day before. While the German tanks leaguered for the night, a section of 20 Company laid a minefield around the West Yorks position. Next day (18th) they and the battalion were troubled by accurate enemy sniping, shelling and Stuka dive bombing. That night the company went forward again to lay mines but four of the lorries carrying them were hit by enemy fire and blew up. Continued shelling and machine gun fire prevented further mine laying but 1000 yards of wire fence (presumably in a less exposed position) was constructed. Jem Autar Singh and Nk Ishar Singh became missing (presumed POW) during the initial minefield reconnaissance.

For the next two days a 20 Company section worked on improving the West Yorks defences, including anti-tank gun positions on the north face of the ridge. On July 21st 3/14 Punjabis attacked through the West Yorks with 20 Company following up to clear mines for a tank attack next morning, but lack of reconnaissance and preparation resulted in heavy infantry losses and 9 Brigade's withdrawal. 20 Company remained in the area and were tasked on 24th, with 4 (Bengal) Company and a New Zealand company, to connect up the minefields astride the ridge. The work was completed during the night of 25th, the company having by then laid 2000 mines at a density of one per yard of front. Also during that night and the next a section was tasked to destroy guns and equipment, which had been left on the battlefield by the enemy, as well as salvaging our own

transport and equipment. The work continued the next night. That same night the OC and Lt Hughes, with infantry patrol protection, made a reconnaissance of enemy mine fields. On the night of 27th Capt Abbott, with a section detachment, accompanied a 3/14 Punjabi patrol and destroyed two enemy anti tank guns covering their minefield. On the following night the OC took some British mechanics and salvaged two of our own tanks in the enemy minefield. However, the company's main work on the nights of July 28, 29, 30 and 31 was to double the density of the minefield covering 9 Brigade's front. On the last of these nights anti personnel shrapnel mines were also sown on the brigade frontage.

Mine laying continued for the first four nights of August. On the night of 1st a field of 1400 anti-tank mines was sown in front of infantry positions to the south of the Ruweisat ridge. For the next three nights shrapnel mines with trip wires were laid on the enemy side of the field, at times under fire. On the night of 2nd an abandoned enemy tank was completely destroyed with a demolition charge. For the next ten days the company worked on a new infantry defence position, Bastion "C", further west on the ridge. Trenches and positions for 2 West Yorks and 3/14 Punjabis, mainly in solid rock, had to be drilled and blasted. Compressor drills and picks were the primary tools. Much of the work had to be done at night due to enemy shelling by day. Day work was however possible on field artillery gun pits in less exposed areas, but not for the anti-tank battery which was forward on the ridge. Improving positions and mine laying in front of them continued throughout the month. The heat and flies by day were frightful and caused as many casualties as enemy shelling. The working strength of 20 Company sections had dropped by over two-thirds when 50 reinforcements were welcomed on August 24th. For the next four nights the company blasted fresh positions for 2 West Yorks. 1000 yards of triple danner wire fence sown with shrapnel anti-personnel mines was erected to protect their position. Some clearing of stray mines was also necessary.

During the last week of August the British Prime Minister, Winston Churchill, visited the desert which he declared was now to be the decisive theatre of war, with priority for reinforcements and equipment. General Auchinleck went to India to take over as CinC from General Wavell who became the Viceroy. General Alexander became CinC Middle East with Lt Gen Montgomery in command of the 8th Army. Rommel, who had been building his reserves, decided that he had to attack again before major reinforcements reached Montgomery's army.

The first battle of Alamein started on August 31st with a diversionary attack against the 2 West Yorks on the Ruweisat ridge but their forward positions were restored in a counter attack. Rommel's main thrust came the next night through the southern minefield and aimed at the western end of the Alam el Halfa position held by the newly arrived 44 British Div. Lifting mines to make a gap for German armour to go through was costly in time, giving the New Zealanders and 7 Armoured Div an excellent target for enfilading fire from the Ruweisat ridge. With at least a quarter of his strength disabled, Rommel's strike force withdrew to try

again the next day. Again he suffered heavy losses being steadily bombed by aircraft and shelled by artillery. Attempts to lure the 8th Army into a major armoured counter attack failed. A limited New Zealand and British infantry attack, to close the gap in the minefield, suffered heavy casualties, but was partially successful. With tank fuel in short supply, Rommel, on September 15th, withdrew behind the minefields but held on to insignificant ground gained on his side of them. Lt Gen Montgomery, so as to conserve his forces and resources, called off further counter attacks on the 7th. The battle of Alam el Halfa was Rommel's last opportunity for victory while the 8th Army was still relatively weak, especially in armour. But, for the first time in 1942, his tactics failed and cost him severe losses in tanks and men. For the next six weeks the front became stabilised with no major attack by either side.

The 5th Indian Division, with 5 and 9 Brigades, had remained in the Ruweisat ridge area throughout the battle, although Div HQ with the CRE's HQ moved a mile to the north. In spite of a general "stand to arms" order on August 31st, the first day of the enemy's diversionary attack on the ridge, the CRE ordered his two field companies (2 Bengal and 20 RB) to continue improving infantry defences. 20 Company also laid 200 anti-personnel mines in front of the forward defences. That night the company repaired damage done by the enemy to the minefields north of the ridge. More shrapnel lines were also laid. Next day 20 Company laid anti-tank mines, in what had been a dummy minefield, in front of Bastion C, 4/7 Rajput's position. During the night the company did more mine-laying on 9 Brigade front. On September 2nd 20 Company (less one section left with 9 Brigade) moved into Bastion C taking over the north-west sector infantry defences, which the company manned until September 4th when they handed the position back to the infantry and took some badly needed rest. However, No 3 Section, which had remained on the ridge with 9 Brigade, laid anti personnel mines east of a minefield gap for patrols. This was the last act of 5 Div sappers in the Western Desert. They had contributed greatly to repulsing the enemy in the first battle of Alamein. Between 7th and 9th September the division was relieved by 4 Div and 12 (Madras) Field Company took over from 20 Company.

After a visit by Maj Gen Roome, EinC (India), 5 Div sappers moved with the division back to Alexandria on September 10th and then on to Cairo on 12th where, after a fortnight's rest and re-equipment, they moved to Iraq, leaving 21 Company in Cyprus where they had moved in mid-July (see chapters 7 and 9).

Alamein to Tunis - September 1942 to May 1943

Since April 1942 when 5 Div had taken over in Cyrenaica from 4 Div, the latter had been widely dispersed to several other formations. Taking over from 5 Div on the Ruweisat ridge on September 10th, Maj Gen Tucker and his 4 Div HQ had two of his brigades, the 5th and 7th, returned to their command. The 11th Brigade with 18 (RB) Field Company had been captured in Tobruk. The CRE (Lt Col Blundell) had 2 (Bengal), 4 (Bengal), and 12 (Madras) Field Companies and 11

(Madras) Field Park Company under command, although his small HQ remained a Royal Bombay staff unit.

On taking over the Ruweisat ridge the first task was to close a gap in the defences between the northern tip of the ridge and the nearest South African brigade, nearly three miles across the valley to the north. All units worked like beavers, with sapper support and assistance, to establish a system of strong points each encircled by its own minefield and wire entanglements. To supplement the anti-tank screen 120 Spigat mortars were dug in along the divisional front. Patrolling, raiding, and harassing the enemy positions by night became the division's main task.

The enemy was encouraged to believe that the 8th Army's expected offensive would be launched from the Ruweisat ridge. However 4 Div was not allotted a leading role in the offensive plans, its primary task being to demonstrate aggressive action. In order to relieve 1st SA Div for the battle, 4 Div undertook additional responsibilities on its right flank.

The battle of Alamein started on October 23rd, with 4 Div under 131 Corps in a defensive role. However, as the main thrusts to the north could not initially break through attacking Rommel's armoured reserves, 8th Army's thrust line for 10 Armoured Corps was shifted south-west. 5 Brigade, having been relieved by 7 Brigade in the Ruweisat area, were moved twelve miles to the north to join 51 Highland Div in the Kidney ridge area. There, on the night of November 2nd, they helped create a gap in the enemy defences for the armoured force to pass through next morning. A 5 Brigade column, with 12 (Madras) Field Company, was able to follow up through a maze of minefields and rounded up much of an Italian division by the 6th. Next day the division was withdrawn from offensive operations and tasked with battle field salvage tasks, much of which were directed and controlled by the CRE and his HQ. They regarded the task as menial, but they salvaged 1500 tons daily - six times their quota - in the hope of completing the job quickly and catching up with the war.

Capt (then Lt) Orchard, who rejoined HQ 4 Div Engrs in November, prior to being posted to 12 (Madras) Field Company, remembers his arrival: "As we drew up at the CRE's mobile office, near the Ruweisat Ridge, there was a sound like a pistol shot and to my amazement two figures hurled themselves out of the office truck, into a nearby slit trench, while shouting at me to get down. After a minute or two the CRE (Lt Col Blundell) and his adjutant (Capt Plummer) emerged from the trench. It transpired that they had been dismantling a light Panzer mine encountered, I was told, for the first time at Alamein, but little seen later in N Africa. Having failed to remove what was assumed to be a central fuse, an attempt was being made to unscrew one of the five peripheral nuts when an igniter exploded - fortunately the central brass knob was in the "sicher" position.

Rommel started withdrawing from Alamein on November 6th in torrential rain, which hampered his units less than the 8th Army's pursuing columns. As a result Rommel was able to extricate much of his battered force. On November 14th Tobruk was retaken. By the end of the month the enemy was back, where he had been eleven months previously, in the Ajedabia coastal marshes, 150 miles south of Benghazi. However 4 Div was grounded to provide transport for other advancing formations. It was not until mid-December that they moved up, over several days, and then only to the Tobruk area with Div HQ in El Adem, 2 (Bengal) Field Company having left 4 Div to rejoin 5 Div in Iraq.

In early January 5 Brigade, with 4 Company, reached Benghazi. The other two divisional engineer units did not get there until the end of February. Meanwhile 5 Brigade and 4 Company had moved on, still well behind the leading formations, to Tripoli. There was much for engineers to do restoring both Benghazi and Tripoli harbours, particularly Benghazi which had suffered a bad storm in January. Both ports were vital in the need to reduce 8th Army's logistic problems. However 4 Div was impatient to rejoin the war which was, by early March, 185 miles west of Tripoli, in the Medenine and Mareth areas.

Rommel was determined to stand on the classical Mareth line and on March 5th he attacked Medenine, hoping to get behind and trap 8th Army's leading formations that had closed up to the Mareth line. The battle was won by anti tank gunners knocking out 52 German tanks. From then on Rommel was facing three fronts, as an American corps from the Allies' Algerian landings was advancing in central Tunisia, as was 1st British Army to the north. Lt Gen Montgomery immediately put preparations in hand to assault the Mareth line on March 20th. Both 5 and 7 Brigade of 4 Div were involved but progress was slowed on reaching the 200ft wide, 20ft deep sheer-sided Wadi Zig Zaou. The British sappers of 50 Northumbrian Division suffered heavy casualties as they strove to build crossings on the night of 21st. One light bridge was constructed but collapsed as some tanks prematurely crossed. Next day the enemy counter attacked and recaptured most of the bridgehead. 4 Div sappers were then placed under 50 Div to effect the crossings. Lt Col Blundell gave 11 Field Park Company a few hours to make 150 fascines, 10 ft long, 2ft in diameter. On the night of the 22nd 4 and 12 Field Companies broke down the wadi banks, placed the fascines and a wire mesh trackway over them, while under intense enemy artillery and small arms fire. At 0430 the crossings were completed and the sappers withdrew to enable the infantry, waiting behind, to cross and reinforce their tenuously small bridgehead. The 'Man' of Wadi Zig Zaou was undoubtedly the CRE as described in *Fourth Indian Division*:

"Lt Col John Blundell was everywhere with his cheery laugh and exhortations. He pointed out how safe others must be since a man of his height remained unhurt. (Actually the peak of his cap had been shot off). A Cheshire officer reached the Wadi to ask for mine detectors in order to clear a way to one of his men who had been wounded in a minefield. Without hesitation Lt Col Blundell and a sapper proceeded to the rescue. When the sapper was hit by a

fixed line machine-gun Blundell sheltered him with his body and carried him to safety.

"Before the sappers withdrew on the completion of the crossings it had been explained to them that if they were seen running to the rear it might have an unfortunate effect on the waiting infantry. Lt Col Blundell therefore ordered that all should move back at a casual pace, chatting and joking as if on some ordinary occasion. The CRE himself walked even more slowly than the others, stopping often to speak to infantry groups, explaining the situation. On such occasions the Sappers and Miners halted around their officer, moving on only when he moved. This cool behaviour was not wasted. After the battle a number of units testified to the heartening effect of the calm and confident bearing of the Indian Sappers and Miners."

For this distinguished service the CRE was awarded the DSO, Lt Gen Montgomery personally signing the following citation:

"On the night of 22/23 Mar 43, Lt Col Blundell was responsible for improving and making wheel and track crossings over the Wadi Zig Zauou on 50 Div front. He personally reconnoitred the two crossings under very heavy shell fire. He decided to begin work with his sappers at 2330 and stayed with the two parties directing the work under heavy fire for the whole period. The division were due to counter-attack at 0200 on morning 23 Mar and he was advised to stop work from that time, as his party was in front of the attacking troops and defensive fire would be brought to bear in the wadi. This attack did not materialise and Lt Col Blundell decided to carry on without further reference. He was ordered to withdraw at 0400 on 23 Mar, and by that time had improved these crossings sufficiently to enable tanks and carriers to be brought back without loss. He showed complete disregard for his own personal safety, and his courage and bravery inspired the Indian Sappers and Miners to carry out this work under most trying conditions."

Two nights later (24/25 March) 4 Div Sappers were again clearing mines but this time ahead of their own 4 Div in a flanking advance through the Halfour pass and mountains, by passing Mareth. With the CRE again at the critical point, 4 Company, with rock drills, a bulldozer and Gurkha assistance, built up gaps in the Beni Zeitene defile road on March 27th. This enabled the leading elements of 4 Div to descend to the Gabes plain., behind the Mareth line, on March 28th. Meanwhile 8th Army's coastal thrusts through and round the Mareth line were also threatening the enemy's rear. Rommel withdrew rapidly to another strong defence line, 20 miles north of Gabes, based on salt marshes and the Wadi Akarit with an anti tank ditch extension.

The battle of the Wadi Akarit began during the night of April 5th. Although the enemy's right flank in the hills had been turned by 4 Div, and 51 Highland Div had broken through on the plain, the enemy's artillery was still ranged on the

wadi anti-tank ditch. There was some delay in launching armour through the gap and 4 Div engineers were sent forward on April 6th to finish a half completed crossing of the wadi/ditch and to construct another. During the afternoon the CRE came to the site just as our tanks started to move through and the enemy intensified his shelling of the area. Two shells in quick succession struck the crossing site killing the OC 4 Company (Maj Murray), one of his officers, an American liaison officer and several men, and wounded many others including the CRE, Lt Col Blundell, who lived only a short time; characteristically his last words were a message for his successor. Thus passed a great officer and gallant gentleman. Maj Gen Toker (GOC 4 Div) wrote: "He died yesterday evening, mourned by thousands of humble Indian soldiers". Toker appointed Maj JA Cameron as CRE in his place. Maj RH Eagan, OC 21 (RB) Field Company, was temporarily appointed OC 4 (Bengal) Field Company. Another sapper tragedy at Wadi Akarit was the death of Eighth Army's brilliant Chief Engineer, Brig FH Kisch CB CBE DSO, who (as mentioned in chapter eight) had been the 2IC of 21 Company in 1914/15. He had gone forward to see for himself the problems which had arisen in the repair of the main road bridge over the wadi and was killed by the explosion of a mine.

The Wadi Akarit battle was regarded as the fiercest since Alamein. Much of the credit for Eighth Army's victory was contributed by the 4th Indian Division. Although the Germans managed to extricate most of their two divisions, 7000 Italians surrendered. The victory enabled the Allies to form a continuous front encircling the remaining enemy in Tunisia. This was achieved on April 7th, the day after the battle, when a Gurkha patrol met an American one on the Gafsa - Akarit road. Sfax was occupied on April 10th and Sousse on the 12th. By the evening of the 13th the leading troops were up against the powerful anti-tank defences of the Enfidaville position. The Axis forces, now under General von Arnim, had been reinforced by air from Sicily. After that First and Eighth Armies and the American Corps had linked up, General Alexander became the Allied commander in Tunisia. The mountainous country, particularly the Djebel Garci north west of Enfidaville, was unsuitable for armour so infantry formations took over the main operational role. To ease the difficulties of the First Army and the Americans in the north and centre, the Eighth Army was ordered to pin down the enemy in the south. The Enfidaville operation was accordingly mounted on April 20th, but after a limited advance a halt was called to enable the main allied thrust to be made in the central front area.

21 (RB) Field Company joins 4th Indian Division

21 Company, under Maj RH Eagan, left the Canal Zone on March 1st. With their vehicles in a poor state they reached Benghazi on the 9th and Tripoli on 17th. There the company worked on the mole and on some bridges. Their tradesmen also did repair work for a hospital. These tasks continued until the end of March, when the company war diary ends. Their diaries for the rest of the year have not been found.. However, from HQ 4 Div Engrs diaries it would

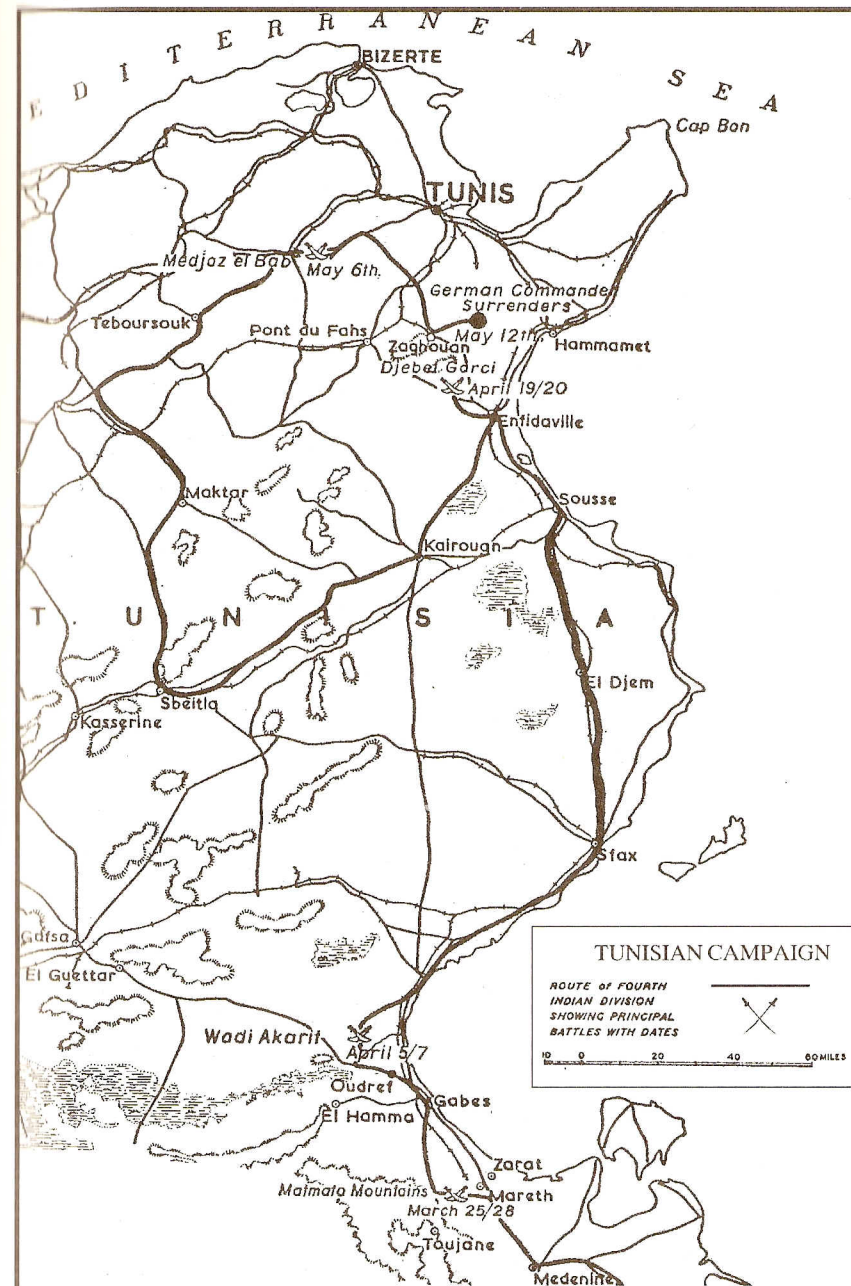
seem that the company joined the division on April 19th, the day before the start of the short Enfidaville operation. The CRE'S HQ diary records that the company was "in fine form and keen to get cracking". Capt Fraser was acting OC while Maj Egan temporarily commanded 4 (Bengal) Field Company, as already explained.

Operations in the Djebel were called off on the 29th and next day 4 Div was ordered to join First Army and move that night by a circuitous 230 mile route round the mountains to TebourSouk (see map for route). Just as the divisional engineers were forming up the mobile Naafi arrived. They lost no time in monopolising it prior to their nightmare march in their decrepit worn out transport. Their purchases no doubt sustained them during the troublesome journey that night. Capt Orchard recounts that every vehicle had to carry all it needed for the journey and that there was only one stop for topping up fuel: "we moved off at last light with orders to follow closely the vehicle in front. No lights were allowed and drivers had to change over on the move. Most of the vehicles did not have cabs or windcreens. My driver and I changed over by the relief climbing on to the back of the driver's seat and sliding down as the relieved driver scrambled sideways. Many of us were tired before the journey started. Driving nose to tail at 10-15mph and trying to concentrate on the not always visible vehicle in front was tiring and sent many drivers off to sleep. In the mountainous sections there were some fatal results. It was said later that casualties for the journey were ten times those of the following final battle for Tunisia. Over 100 vehicles were wrecked. On several occasions the convoy sounded like railway wagons being shunted into sidings." However it was confirmed later by General von Arnim that he was unaware of the move of 4 Div from Eighth Army to First Army's front.

Between 2nd and 5th May 4 Div Tactical and main HQ were established, mainly by bulldozer, in the hillside east of the village of Montmarnand, on the eastern side of the Medjez-el-Bab gap. The First Army weapons and equipment available to support the division surpassed anything the Eighth had ever been able to provide. For the sappers, troops of Scorpions (armoured mine sweepers) with their flails and pilot vehicles (lorries mounting concrete rollers on arms in front and behind) were attached under command. The flail tanks could only be used for short spells due to overheating so the pilot vehicles were employed to find the front of any minefield. That done, probably with the loss of their rollers, the scorpion tanks took over. With only two days of preparation for the attack available there was no time for any training with these new devices and their operators, as they had also to make up prepared charges to deal with pill boxes and fortifications.

The Final Battle for Tunisia

The attack opened on the left flank at dusk on May 5th after a ferocious bombardment. At 2300 4 Div's 5 and 7 Brigades moved forward and at 0400 on May 6th they attacked the enemy in their hill defences on the eastern side of



Medjez-el-Bab gap and gateway to Tunis. Capt Orchard relates: "Visibility was poor without lights and a 21 Company pilot vehicle on turning a bend to cross a small bridge, went to the wrong side of the parapet and plunged down into the stream. Several sappers were injured by the concrete rollers, carried in the rear of the vehicle, which were flung out. With only a single lane available the injured had to be left until the fighting echelons had passed through. Deploying into battle formation at dawn, it took some 20 minutes to assemble the pilot vehicles. They moved forward at slow walking pace and proved impossible to steer except on flat level ground. After half an hour the pilot vehicles were either broken down or abandoned, as they could not keep up with infantry". So it was back to sappers with prodders and hand held mine detectors to clear the way. However mines had only been hastily laid at bridges and other bottlenecks, and some so hastily they had not even been primed.

Next day (7th) Div HQ moved forward to Montmarnand farm. This and other farms in the area, had huge quantities of partly fermented wine in vats which the enemy had spiked as they withdrew. The field companies hastily set up their pumping sets to empty the wine from leaking vats into empty sound ones. On May 9th Div HQ moved on to another village, Ain-el-Asher. Maj HW Kitson, who had been commanding 27 (RB) Field Company in PAIforce, arrived to take over 4 (Bengal) Field Company from Maj Eagan, who was then able to return to 21 Company where Capt Fraser had been acting OC. Two days later 21 Company was fencing the minefields which bounded the main supply route.

Meanwhile, in the afternoon of May 13th, 7 Brigade advancing south of Tunis reached the vicinity of General von Arnim's HQ. Lt Orchard, the brigade engineer recce' officer, who later became the CRE's adjutant, was with the Royal Sussex leading platoon when an enemy light vehicle with a white flag approached. It was a staff officer with the general's message of surrender. A meeting was quickly arranged for von Arnim to surrender to the GOC 4 Ind Div, Maj Gen Taker. The CRE, Lt Col Cameron, was present at the meeting. At 1800 hrs that evening all organised resistance in North Africa ceased. A quarter of a million prisoners had been taken and more were to come. 4 Div's take ran into many thousands. Two years and eleven months after Italy had brazenly declared war all their empire in North Africa had been lost. Rest and recuperation was the main menu for the remainder of May for most of 4 Div but, as always, there was sapper work to be done. The CRE's diary for May 24th shows that 21 Company was improving the track serving 4 Div Main HQ.

Return to Egypt - May to November 1943

As well as not finding 21 Company's war diaries for 1943, after the end of March, those for HQ 4 Div Engrs for the months of June, July and August 1943 have also not been traced. However, from other histories, it is gleaned that the divisional engineers left the Tunis area at the end of May and by the beginning of June were resting on pleasant Tripolitanian beaches. On the 19th they

concentrated in Tripoli for a victory parade in the presence of HM King George VI. It was a very memorable occasion as the King's car stopped opposite the assembled 4 Div Engineers. He shook hands with their CRE and talked to their senior VCO, Sub Narinder Singh. The sappers gave three cheers as their King - Emperor stood admiring them.

Next day the sapper companies moved to Misurata for a few more day's rest and recuperation before commencing the 1500 miles' journey back to the Nile delta. They reached Benghazi at the end of June, Tobruk on July 4th and four days later came to rest outside Alexandria. Most of the Eighth Army's formations, which been with 4 Div, remained in Tunisia preparing for landings in Sicily which started on July 9th.

The island was conquered in five weeks; Mussolini resigned leaving Marshal Badoglio to negotiate an armistice. Eventually, on September 3rd, he surrendered unconditionally when the Eighth Army crossed the straits of Messina into Italy. Meanwhile the Germans had poured thirteen divisions into the country which they were determined to hold. Up to then 4 Div had hoped to return to India by the end of the year but, with stiffening German resistance, it became clear that the Allies would need more infantry formations in Italy. The Indian divisions, particularly the battle experienced 4 Div, were much needed.

Early in August, before training started for further operations, it was arranged that representative party of 4 Div should tour Great Britain for a fortnight. Every class of the Indian Army was represented in the party, which included fourteen VCOs, five IORs and five followers. One of each of these categories was chosen from the divisional engineers. The RBS&M were proud to select Sweeper Parsadi Rain as their representative. The party was acclaimed, feted and splendidly entertained in its tour of the working people of Great Britain who had also endured the rigours of bombing and war.

In September Div HQ ceased its long trek back from Tunisia and came to rest at Kastina, east of the Canal in Palestine. Lt Col EE Stenhouse RE took over from Lt Col Cameron as CRE. 5 Brigade, with 4 and 21 Field Companies, remained in Burg-el-Arab (Alexandria area) training for 'Dry Shod' amphibious operations until October 6th. Whilst there Lts Barnes and Wolferstan joined 21 Company. Wolferstan remembers "the company were visited by an extraordinary character - Bradley Pasha - who was treated by the Bedouin tribes as one of their own. This had proved very useful during the North African campaign as the Arabs had passed on information on enemy movements." After transferring to the Combined Operations Training Centre at Kabrit in the Canal Zone, they did a fortnight's 'Wet Shod' training. For the latter half of October and early November 21 Company, with 4 Company still alongside them, were in the Laboue area in Syria training for mountain warfare - their future role in Italy. Div HQ with CRE's HQ was at Baalbeck, the ancient Roman city.

Early in November 4 Div concentrated in Egypt, their sappers arriving at Qassassin on the 8th. Next day they were warned for a move to Italy. Advance parties left on November 15th and main bodies embarked at Port Tewfik on the 30th, and, after four days at sea in convoy, disembarked at Taranto on December 8th.

Nominal roll of those known to have served with RBS&M units in the retreat from Gazala to Alamein and the advance to Tunis

HQ 4 Div Engrs - September 1942 to December 1943
 CREs Lt Col JH Blundell DSO (Killed in action Apl 6 43)
 Lt Col JA Cameron (Apr to Sep 43)
 Lt Col EE Stenhouse (from Sep 43)
 Adjutants Capt BAA Plummer (to Dec 42)
 Capt AOH Neilson (from Dec 42)
 Field Engineers & LOs Cpts HW Irwin, RD Penny and AJ Grimes.
 Lts Dedman, D Hutchinson, NT Trayler, DS Orchard,
 T Guilbride, MFJ Barnes.
 Senior VCO Sub Narinder Singh

HQ 5 Div Engrs - April to September 1942
 CREs Lt Col AJH Napier OBE
 Maj JC Winchester (officiating for several periods)
 Adjutants Capt A Selkirk (to Jun 42),
 Capt TE Potts (Jun to Jul 42)
 Capt HS Williams (from Jul 42)
 Field Engineers & LOs Cpts and Lts AE Scott, IRH Stubbs, JW Hartley,
 PM Head, AGSkinner and AR Ballantyne
 RSM WOI Coinger

20 (RB) Field Company - April to September 1942
 OC Maj JC Winchester
 2ICs Capt PP Miles (to Jun 42)
 Capt OH Abbot (from Jun 42)
 Section officers Lts HM Boardman (killed in action Jun 42),
 PCM Mills (POW Jun 42), LD Hughes, PM Head,
 King (POW Jul 42)
 Subedar Harnham Singh
 Jemadars Bacharam Jadhao IDSM, Faiz Ahmed,
 Autar Singh (POW Jul 42)
 IOR Nk Isher Singh (POW Jul 42)

21 (RB) Field Company - April to September 1942 with 5 Indian Division. March to
 December 1943 with 4 Indian Division
 OCs Maj RWW How (POW 18 Jun 42)
 Maj PP Miles (POW 27 Jun 42)
 Maj JC Winchester (temporarily early Jul 42)
 Maj RH Eagan IARO (from mid Jul 42)
 2IC Capt PH Fraser
 Section officers Lts JK Beart-Foss MC, NT Trayler, JH Colter, MFJ Barnes,
 EP Minett, Hobson (POW 27 Jun 42), TC Wolferstan
 Mangal Singh
 Subedar Sadig Shah (from Feb 43)
 Jemadar CHM Moh'd Riaz, QMH Muh'd Illahi and Barkat Ali
 Havildars (all from Feb 43)
 IORs and NCEs Spr Shankar Bore IDSM, and Sweeper Parsadi Ram

CHAPTER ELEVEN

ITALY

December 1943-October 1945

**HQ 4 Ind Div Engrs, 21 (RB) Field Company
 97 (RB) Field Company, 301 (RB) Field Park Company**

**Compiled by Major MFJ Barnes MBE, Major DC Browning,
 Captain JPW Braye and Brigadier DA Barker-Wyatt CBE**

The background material for this chapter has been provided mainly from *Fourth Indian Division* and *The Indian Engineers 1939-47* already acknowledged in previous chapters, also *Engineers in the Italian campaign 1943-45* published November 1945. Dates, places and some details were supplied by the war diaries of the RB units taking part in the campaign. However, most of the details have been supplied by RE Journal articles by Brig JRG Finch OBE (August 1994), Maj DC Browning (March 1950) also Major GVM Smith MBE (April 1994), the reminiscences of Lt Col A Rhodes and Cpts JPW Braye and TC Wolferstan, and the substantial memoirs of Majs Barnes and Browning.

Campaign introduction and setting

The American 7th Army and the British 8th Army (without any Indian units) landed in Sicily on 9 and 10 July 1943. They conquered the island in about five weeks, the Germans making good their escape across the Messina Straits. Mussolini resigned but his successor did not surrender to the Allies until 3 September, by which time the Germans had reinforced Italy with thirteen divisions and it had become a German province. Within a month of the 8th Army crossing the Messina Straits on the same date as the Italian surrender, it was clear that the Allies would have to fight all the way through the 600 miles length of Italy and were committed to a war of an endless succession of rivers and mountains, in a winter campaign of bitter icy rain along the Apennine mountain range with peaks rising to over 7,000 feet. If ever there was an engineers' war this was it.

The 8th Army Chief of Staff, Maj-Gen de Guingand KBE CB DSO in "*Operation Victory*" wrote "our speed of advance was determined by the capacity of the sappers to repair bridges and other demolitions. The country was ideal for delay and the Germans had evidently worked out a most efficient plan".

Field-Marshal Alexander, Supreme Allied Commander Mediterranean Theatre, in his 'Order of the Day' addressed to all Engineer Troops at the end of the Italian campaign' said "Seldom have engineers been faced with a more difficult task than in the Italian campaign. By surmounting every obstacle which has confronted you, from the beaches of Sicily across the mountains and rivers of Italy to the Alps, and by developing with such success local production of equipment and material, you have in no small measure contributed to our victory. Feats of engineering without parallel in any other campaign have been performed. You may well be proud of your achievements. I congratulate you on your magnificent work."

Terrain and Climate

Southern and Central Italy comprises north/south Apennine mountain range with rivers running east to west every few miles. As Maj Gen de Guingand goes on to say "the country had a central and increasing lofty spine composed of the Apennine range with peaks rising 7,000 feet or more. An invading army advancing up the 600 miles' length of Italy had to negotiate an endless succession of rivers, ravines and spurs at right angles to the central spine, each offering a natural line of defence which could only be stormed frontally." These gave rise to the engineers' catch phrase "one more river to cross". Further north the mountains stretched almost from coast to coast, with a few difficult passes across to the Po valley beyond. The Germans had constructed their Gothic line along this mountain range. The roads up these passes crossed deep ravines by means of bridges which the enemy had in general destroyed as he retreated. Initially these ravines were crossed by Bailey bridges which in some cases had to have Bailey piers over 100 feet high. During the advance north, the ravines were usually initially crossed by Bailey bridges which subsequently had to be replaced by permanent structures in order to release the Bailey equipment for operational use further forward. Once north of the Gothic line, the Po valley, apart from the actual crossing of the river Po itself, presented few major difficult engineering problems.

Every kind of weather was encountered from hot Mediterranean sun, with a uniform of shirt and shorts, to snow and ice in the mountains when battledress under greatcoats was essential; torrential rain and snow to dusty drought was encountered during the advance up Italy. In the mountains, north of Florence, piles of stone chippings for road resurfacing and repairs were located in dumps every few 100 yards with 15 foot high poles placed alongside them so that they could be found after the heavy snowfalls. After the spring thaw, however, the roads turned into quagmires overnight, with stuck vehicles having to be winched clear. As Alan Moorehead writes in his *Eclipse* "The Allied Forces were committed to a war of rivers and mountains in bitter icy rain, a winter campaign along some of the highest ranges in Europe".

4th Indian Division arrival and early deployment

As described at the end of the last chapter 4 Div moved from Tunisia at the end of that campaign to the Lebanon for mountain warfare training in the autumn of 1943. Still under Maj Gen FIS Taker CB DSO OBE the division sailed from Suez in early December, disembarking at Taranto, on Italy's heel, on the 8th. The engineer units under command of the divisional CRE (Lt Col EE Stenhouse) with his RB HQ staff unit were 4 (Bengal) Field Company, 12 (Madras) Field Company, 21 (RB) Field Company, 11 (Madras) Field Park Company and 5 (Bengal) Bridging Platoon. 21 Company (Maj RH Egan) was affiliated to 11 Indian Infantry Brigade. The company's three platoons 1, 2 and 3 were respectively Mahrattas, PMs and Sikhs.

In mid-December the division moved to the Potenza area to continue their training and acclimatisation in the hilly country to the north-west of the town, 75 miles west of Taranto. To the relief of the CRE and the company OCs all the units arrived from Taranto without loss of a vehicle, although there were several lucky escapes, in particular 21 Company's compressor truck which nearly slipped off the hillside road to certain destruction. The CRE arranged for 80 feet of Bailey bridge equipment to be sent from the engineer depot in Bari for training each of the field companies. However the weather, which had been very bad ever since the division arrived in Italy, became even worse with snow and blizzards. The CRE's HQ was very comfortably located in a modern building in the centre of Potenza but the field companies were located in and around villages near to Potenza. The officers of 21 Company were the envy of the other companies as their OC (affectionately known as 'Uncle Egan'), a tea planter in peace time, built a very effective stone fireplace inside the mess tent which hosted a very convivial Christmas party. Despite the bad weather, training continued subject to snow clearance work on the divisional routes. On January 6th 1 Platoon was snow-bound with drifts up to 6ft deep blocking all the roads. Jem Labh Singh with drivers and two jeeps set out on a circuitous route via Spinozza, Venosa and Rionero to try and reach 1 Platoon. Lt Wolferstan, with a snow clearing party, also set out with two 3 tonners following Labh Singh. Eventually all managed to get through by the evening of the 8th, with much needed rations and dry clothing. They found that two sappers were badly gassed by the charcoal fire and another seriously ill from the extreme cold. All three sappers recovered.

Mediterranean weather returned on January 9th and the warm sun soon made movement much easier on most routes. The next day the call came to the division to move forward under command of 13 Corps. 21 Company moved on the 12th to join 7 Brigade convoy at Canosa. The convoy moved north through Cerignola, Foggia and San Severo to arrive at Lanciano on the evening of the 14th. 7 Brigade moved forward immediately in drenching rain and relieved 5 NZ Brigade on the right of Orsogna in a sector which ran down to the Arielli river.

Orsogna Front January 1944

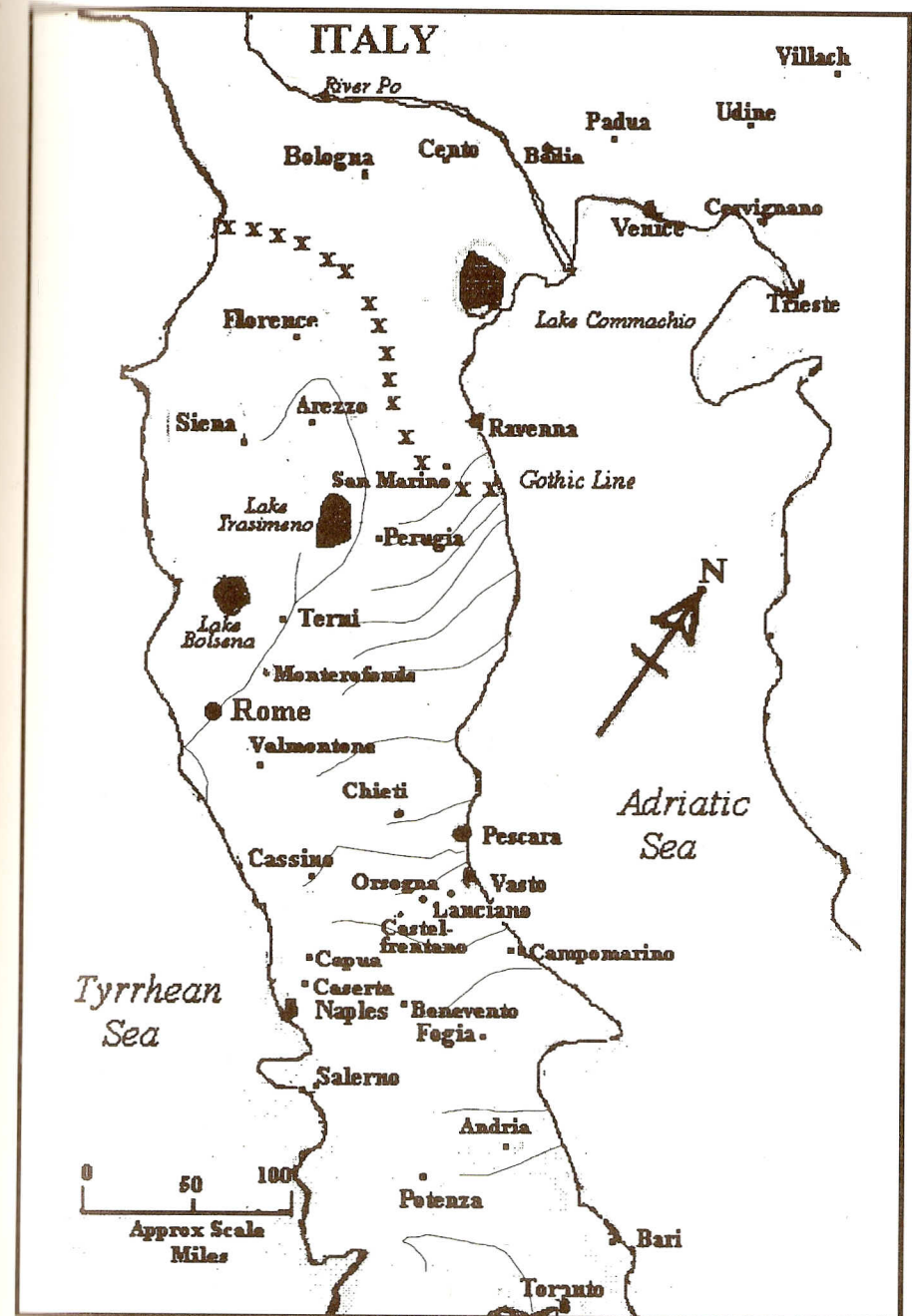
Just as battle was about to be joined the 2IC of 21 Company, Capt D Fraser, was posted to be OC 5 (Bengal) Field Company in 8 Ind Div. Lt Colter (2 Platoon) became

2IC with Lt Barnes from the CRE's HQ taking his place, Lt Minett (3 Platoon) and Lt Wolferstan (IO) also exchanged appointments and Lt Traylor (1 Platoon) took Barnes' place as FE in the CRE's HQ. Lt Hughes was appointed 1 Platoon commander. The main task of the divisional engineers was to keep the forward routes clear. The roads on the divisional front were in an atrocious state due to the constant shelling and the traffic which made maintenance extremely difficult.

Change-overs in the line of units and formations in mid-January created a lot of movement noticeable to the enemy who shelled and mortared our positions at any hour of day and night. Lt Barnes housed his new platoon of PMs in a rather exposed small farm cottage. He wrote: "It was an extremely good place, in hindsight, for the new platoon commander to get to know his platoon havildar, Barkat Ali, and his sappers and for them to get to know him. I was very quick to appreciate that more than half of the platoon had seen service in Eritrea and N Africa for nearly four years. Many would have been havildars and certainly naiks if they had been serving in India or elsewhere. After one shelling, when I was supervising a section of road repair, Hav Barkat Ali had noticed that I had been extremely quick in getting flat on the ground. I told him that before leaving England I was a rugby scrum-half so it was easy for me to throw myself forward on to the ground. He thought for a while and said 'We in the platoon have faith in Allah - if Allah wills it for us to be hit it does not matter how fast we are in getting down on the ground'. Another shelling took place down the road and I left to see whether we had sustained any casualties."

In late January the weather further deteriorated making roads impassable for all except four wheeled drive and chains. Lt Barnes managed to obtain a Bailey bridge panel which he tied to the back of his jeep and with three sappers standing on the side of the panel was able to flatten a very rutted exposed section of the road which the Germans had pin-pointed as a target. This went down well with the platoon! As movement was severely restricted, it was not possible to see or visit Company HQ or the other platoons which were employed on similar work. Company HQ was the unlucky target of enemy intensified mortar and shell fire. Sprs Mohd Sadiq and Darsham Singh were killed.

The battle for Orsogna was expected to open on February 7th when the main assault to turn the town would be mounted from the north-west, together with a subsidiary attack against the eastern approaches. No one was happy over the prospects. The spongy fields confined the armour to a few congested roads and the infantry were also bogged down in the sodden morasses along the swollen streams. The enemy intensified their mortar and shellfire in the area. Maj Gen Toker was therefore thankful to be informed that the assault on Orsogna had been abandoned and that 4 Ind Div would move to join 5th Army at once. He wrote: "I must say that I think Providence has been kind to the division. Each time when we were about to be cast at some awful fortress something has intervened to help me fight the battle of stopping a needless sacrifice of life. I hope it is not the 5th Army's intention to use us against some impregnable place." His fears were not without foundation: 4 Div had been ordered to Cassino.

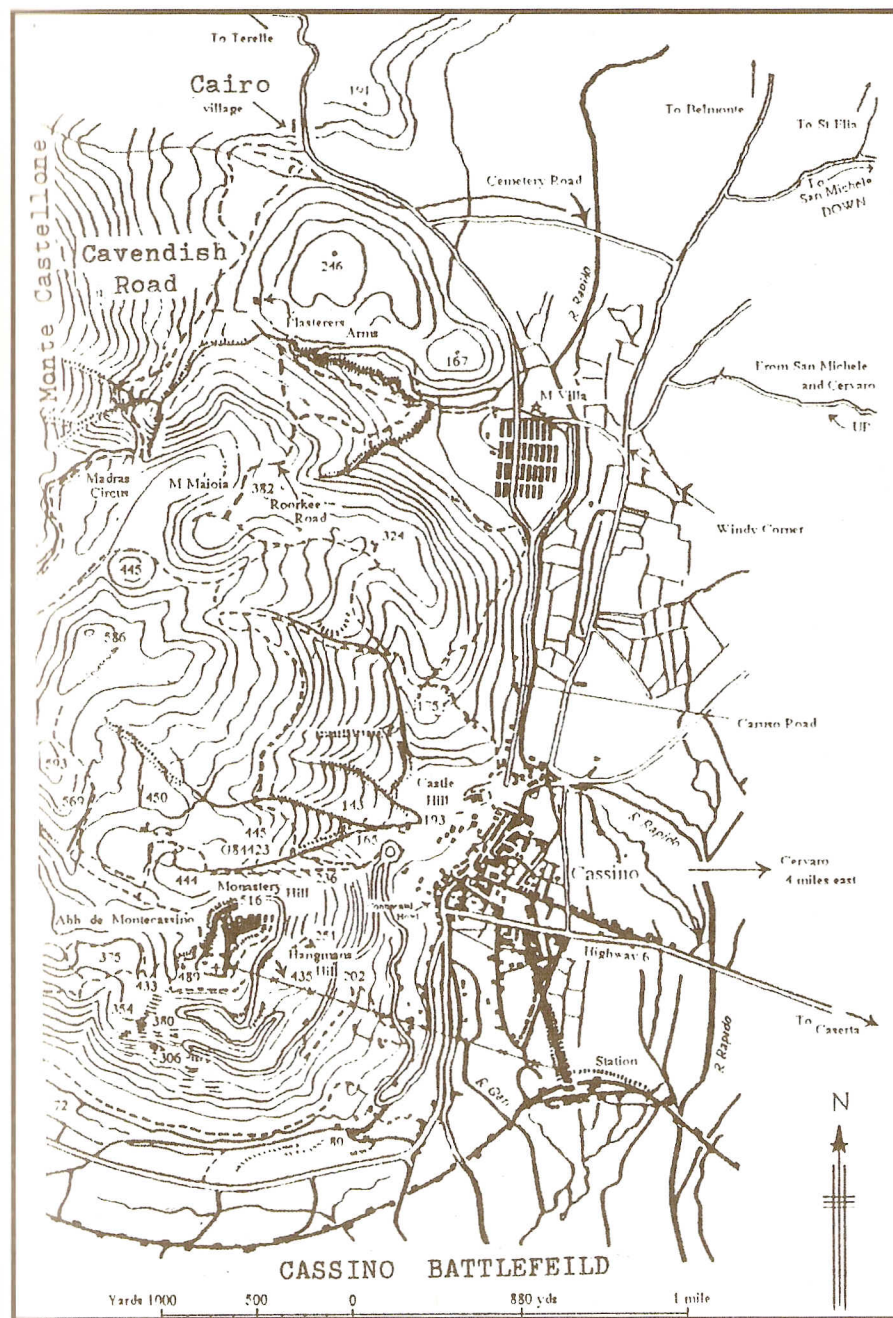


21 Company started their journey to the 5th Army front on the last day of January, travelling in convoy to Carrallo, Bovia-Latina arriving at Venafrò on February 6th. The road works in the snow and slush had taken its toll on the 3-ton trucks, all of which had to be towed by the White scout cars and other vehicles due to burnt out clutches. At Venafrò each platoon was sent separately for training, at the School of Military Engineering (SME), in mine warfare, with particular instruction in clearance of the wooden Schümine (small wooden box mines with only a very small igniter cap, undetectable by mine detector) and the wooden Holtz mine, and Bailey bridging. Whilst 1 Platoon was there the river Volturno rose so high that there were fears of it washing away the main road bridge at Capua, which would have caused a serious problem on Route 6 from Naples to Rome via Cassino. Fortunately, the weather improved and the river level slowly lowered to within safe limits, although the bridging area at the SME was flooded. On return of all the platoons to Venafrò the company moved to the Mignano area prior to their move forward for their important role in the second assault on Monte Cassino.

Cassino battles

The New Zealand Corps' (which included 4 Ind Div) first assault on Cassino and the monastery began with the bombing of the Benedictine monastery on a clear blue sky morning on February 15th. 21 Company, whilst preparing to move forward, watched the bombers delivering their loads. 7 Brigade were concentrated on the lower slopes of Monte Cassino with 12 Company portering and working on the mule track on Castellone. 5 Brigade were in the Monte Majola - Pont 382 area with 4 Company also portering and working on a mule track. A failure in liaison meant that 7 Brigade Headquarters had not been informed of the new hour for the strike and consequently some of the forward companies were within 300 to 800 yards of the target. Luckily the casualties were few and were mostly bruised by pieces of the monastery hurled many yards through the air.

21 Company reached the forward assembly area before first light next day and marched in small groups across the river Rapido and the shell ridden open ground along Cemetery Road. They had to take cover on two occasions but managed to reach a nullah near the village of Cairo without loss. Seemingly the enemy, at that time, had other targets to occupy them following the bombing of Cassino and the monastery. After a short rest the company moved to the beginning of the mule track leading to the Colle Maiola and started making camp on the steep side of Monte Castellone, which was out of direct view of the enemy observation posts on Monte Cairo. The site was aptly named "The Plasterer's Arms". The camp looked out at the route the company had walked to the camp and the disused Italian army barracks. It also provided a view of the route which supply vehicles would have to take to reach them and other units located on the slopes nearer the town of Cassino. In times of rest there were anxious moments watching the division's vehicles that had to travel the route at maximum speed from San Michele to the forward units and to



cross the small bridge over the river Rapido before the enemy sprinkled them with shells. The majority of the movement was by night, but inevitably there were times when it was necessary for risks to be taken.

The rest of February 16th was used to dig slit trenches into the hillside. The officers' mess tent was dug down below ground level with a slit trench inside dug into the side of the hill for quick cover. The cook house was some 10ft away, also of similar construction, with a communication trench together with a line for a bell between the two tents. The OC, whose favourite drink was brandy, gave strict instructions to the mess orderly, Feroz Khan, that bottles must be kept below ground. The cookhouse for the VCOs and men was only slightly larger with a separate cook house used solely for brewing tea or hot soup for the whole company. Officers and men had bivouac tents for cover over each slit trench. The main meal was on the work site. The camp, except for cooks and a wireless operator, was evacuated before sunrise and there was no return until dusk. The only vehicles kept there were three jeeps. Water was delivered to the beginning of the track at night and transferred to water containers and carried to the camp. Rations were delivered in the same manner.

All three platoons started work on February 17th on what became known as the Cavendish Road (after the former CRE and Kirkee commandant). The existing mule track was widened from 2 feet to 4 feet along a length of 1230 yds in seven and a half hours. Next day Lts Hughes and Barnes surveyed, using Abney levels, a new alignment for a 9 ft wide jeep track on the same route. 2 Platoon worked on the stretch from near the top of the hillside (the top was in view of the enemy) to the second nullah half-way up the track. 3 Platoon worked on the first nullah crossing in hard rock to make an Irish bridge. The work was hindered by a detachment of our own mortars positioned in the nullah, thus making blasting impossible. In addition there was also continuous enemy mortar fire around the hillside. 1 Platoon worked on the beginning of the track just above the camp site to the first nullah. This stretch also needed reconstruction and strengthening with a lengthy retaining wall. 12 (Madras) Field Company arrived on February 19th to take over construction of the upper half of the track from the second nullah. 2 Platoon, 21 Company was re-deployed with 1 Platoon on the first part of the track. The company camp was mortared three times during the morning. The only casualty was a sapper driver who was wounded.

Up to this point only picks and crowbars had been used in levering rocks to make the track as it was necessary to conceal the extent of the work from the enemy. To speed up construction it was decided to use Beehive borehole-making charges to crack and loosen the worst rocky outcrops. To maintain concealment of the task, the charges were only fired to coincide with enemy mortaring and the firing of friendly mortars nearby. Bailey bridge jacks were also used to lever away large boulders.

Meanwhile another assault on Cassino town and the monastery had been unsuccessful. No ground had been gained, no hole had been punched in the defences.

The battered monastery walls towered above, aloof and impregnable. The battle needed re-alignment and a fresh approach. Yet every move was critical, for the situation on the Anzio bridgehead, on the west coast, remained desperate. The new plan was for 2 NZ Div and 4 Ind Div to attack from the north across the hillsides mounting to the Monte Cassino monastery. A diversionary attack was also to be made using the 'Cavendish Road' jeep track which mounted from Cairo village to the crest of the massif and led into the forward areas. On February 21st, the Chief Engineer, 2 NZ Corps and CRE 4 Ind Div visited 21 Company and complimented the company on the amount of work done in such hazardous and uncomfortable conditions. As a result of this visit, it was sensed that the possibility of making the jeep track into a tank route was envisaged. The need to camouflage this work was, therefore, of paramount importance. Next day the camouflage officer of 14 Corps visited 21 Company to advise on camouflaging the road where it was under close enemy observation. This clearly indicated that a decision was about to be made for the jeep track to be widened for tanks. The usual daily mortar strikes hindered the work but, as Lt Barnes writes: "by now we had got to know the likely timings and the gullies on the hillside which provided refuge". The camouflaging equipment arrived on the night of the 23rd and 2 Platoon started installing it, after last light, the next night. Work was completed by first light next morning despite sleet and snow that continued throughout the night. A further visit on 27th February by the CRE 4 Ind Div and the CE 2NZ Corps confirmed the decision that the jeep track was to be widened for tanks and that the GOC 4 Ind Div had agreed with the recommendation to call the track 'Cavendish Road'. The widening involved an increase from the 8ft cut and fill to 12ft solid cut. With more mechanical equipment on site and more blasting camouflage and concealment was more difficult. Work continued on the night of the 29th in very heavy rain which caused nearly all the slit trenches to collapse. Everyone was wet through so that work on the 29th was restricted to repair on the camp site and repairing two retaining walls on the track.

On March 1st, the widening work began. Although the track was capable of taking jeeps, their use was prohibited in view of the decision to convert the track to a tank route. As the track was still an important mule supply route it was necessary to make a diversion at the top of the track. The whole area of the hillside was shelled periodically by the enemy. LNK Gangaram Bhosle of 1 Platoon and a Sikh of 3 Platoon were killed on March 2nd. In another area of the track during that afternoon, Lt Barnes was thrown to the ground by NK Rehim Ali when a cluster of mortar bombs fell just over the track into the valley below. Hav Barkat Ali, NK Rehim Ali and Lt Barnes were a little shaken by the closeness of the strike. The latter was grateful for NK Rehim Ali's quick action and concern for him at the time.

On March 3rd, Lt Barnes' batman, Spr Barkat Ali, made his early morning call of "Salaam Sahib" and departed to get Sahib's mug of tea. According to the company war diary, four heavy calibre shells, two of which were duds, fell in the company area, killing three NCO's and three sappers and wounding three others of 2 Platoon.

As shells fell regularly around the camp and into the nullah at the bottom of the hillside, Lt Barnes did not stir from his bed. About a minute after the strike, Lt Barnes heard anxious voices in the direction of where he knew 2 Platoon made their early morning cha and leapt out of his slit trench to see bodies and wounded men of his platoon. A shell must have landed in the middle of a group of NCO's, many of whom were blown to pieces. Nk Nur Hussain was alive but very badly injured and Spr Barkat Ali, Lt. 'Barnes' batman, had a splinter wound in his backside and was also bleeding badly. Lt Barnes, with his driver Spr Ghulam Mohd, loaded Nk Nur Hussain on to a stretcher, into his jeep and drove as fast as was possible over the "hell fire" open route to the ADS at San Michele. After waiting for over an hour comforting the other casualties from the company, who arrived at the ADS not long after Lt Barnes, he was informed that Nk Nur Hussain had died. On arrival back at the camp, which was deserted except for three tending the dead, Lt Barnes went up the track to his depleted 2 Platoon. He was very distressed to learn there that Hav Barkat Ali, Nk Rehim Ali, LNK Nazir Alaim, Spr Ali Mohd and Spr Faqar Din had been killed and that two other sappers had been wounded in addition to his batman, making a platoon loss of six killed and three wounded. It was also particularly distressing for him that only the previous day Nk Rehim Ali had protected him from an enemy shelling. Despite the great loss in the platoon, work carried on as usual.

Now that the work on the track also had the assistance of two D4 bulldozers and one D7 bulldozer plus Morris compressor trucks working on the non-exposed section of the track, the widening was appreciably quickened. Unfortunately, the D7 soon sheared its blade. The Chief Engineer, 2 NZ Corps, immediately sent over two D6's each with a trailer compressor operated by a section of 6 NZ Field Company. The work continued in spite of the constant enemy shelling but it did allow prepared explosive charges and beehives to be let off at the same time in order to disguise the work. Low cloud and mist prevailed during March the 4th which restricted the enemy observation across the supply route and the exposed section of the track.

On March the 7th it was the turn of 3 Platoon to be caught in shell fire with the loss of Nk Banta Singh killed and a sapper wounded. Also killed working with 3 Platoon was Spr Jumma Khan from 2 Platoon. For the next three days, work continued on the road both at night and where possible in daytime. 21 Company undoubtedly preferred the mountain track to their hillside camp location. The shelling continued but fortunately there were no further casualties. The exposed section of the route was worked on at night. The camouflage poles and netting were re-erected before first light.

The second assault operation "Bradman to bat" had originally been planned for late February but was delayed by bad weather. From day to day the assault was postponed. Whilst the infantry had by now endured three weeks of winter gales, driving snow and freezing rain on the ridge crests and along the hillsides in their meagre shelters, it allowed time for the completion of the tank road. The enemy, in

addition to shelling and mortaring the supply trails, also used paratroopers to creep forward to strike down unwary sentries. With abysmal ignorance of British psychology they tried propaganda - shouting the names of prisoners taken and promising creature comforts to all who would surrender. They likewise dropped leaflets. Often the Urdu leaflets reached the Royal Sussex and the English leaflets the 4/16 Punjabis; or else they reached 1/2 Gurkhas who could read neither. In spite of their aggressiveness the Germans were feeling the strain. An officer of 31 Field Regiment RA picked up some prisoners on Point 593 who were only too willing to be brought in while 4/16 Punjabi's every now and then found outpost enemy sentries in a mood to surrender.

On March 10th the CRE visited the company with an Armoured Corps officer to check the road for their tanks. The NZ Officer required a few essential alterations involving a little more blasting away of rocks. 1 Platoon of 21 Company stopped their work to sleep in daylight on the hillside in preparation for their night work blasting and clearing, whilst 3 Platoon repaired and replaced the camouflage netting following the blasting. In the early hours of the next morning all platoons of the company retired to the nullah by the road to sleep out of the camp and the shelling. At 1100 the camp area was heavily shelled with no casualties, except two jeeps were knocked out. By mid-day all sections of Cavendish Road were completed. At last light the platoons returned to camp to pack up equipment and their belongings. During the night they marched back across the open area and the river Rapido to the embussing area behind San Michele at Portella. Officers and men arrived at their B Echelon area in the early hours of the next morning, and spent the rest of the day in deep sleep. The majority of the company remained there in readiness to support 5 Brigade on their attack on Monte Cassino.

On March 14th the long awaited signal came "Bradman batting tomorrow". At 0830 next morning the dull throbbing of groups of heavy bombers was heard overhead. In the next 3½ hours 514 heavy and medium bombers crashed 1100 tons of bombs on the target area. The base of monastery hill disappeared in erupting smoke and dust. Nevertheless, with such unmistakable target indicators as the snow clad cone of Monte Cairo and the junction to the two valleys, a number of flights went astray. Army headquarters at Venafrò received a stack of bombs. A part of 4 Div's B Echelon in the upper Rapido valley received a thorough plastering, 50 men and 100 mules being hit. On the stroke of noon the air was rent by an ear-splitting crash as 600 guns spoke as one. Behind a wall of steel the second assault began. Between March 15th and 24th, the battle raged. Eventually the New Zealand and Indian divisions withdrew, not without inflicting heavy losses on the enemy as well as sustaining many casualties themselves. During the six weeks more than 4000 men of 4 Div were killed or wounded.

Having been in effect in the front line continuously for three weeks 21 Company had earned some relief and recuperation. From March 13th to 23rd 1 Platoon remained

ready to support 5 Brigade but most of the rest of the company spent time making mending and training at their out of battle camp. Lt Barnes and a detachment travelled to Minervino on the Adriatic coast, south of Foggia and inland from Barletta, to run a mine warfare course for the newly arrived Central India Horse. It was an excellent change from the daily stonking at Cassino and provided worthwhile training to the CIH before they were to join 4 Div. It also gave confidence to the NCOs and sappers in the detachment that they had not forgotten their mine clearance procedures from the desert days of 1943. It also gave them practice in the difficult clearance of the wooden box mines. On March 24th they returned to the company which had remained in reserve for 4 Div operations. On 21st March the CRE's HQ was dive-bombed and 13 casualties were sustained. It was a cloudy day and gave excellent opportunities for aeroplanes to dive out of the clouds. Sprs Nur Khan and Abdul Aziz died from their wounds on 22nd March; also according to the war diary Cook Parwata and Spr Hinom Khan of 21 Company, but their names do not appear to have been recorded on the Group war memorial Roll of Honour.

78 British Div relieved 4 Ind Div in the line on March 24th. Next day 21 Company sent their three White armoured scout cars to 4 (Bengal) Field Company to help them bring back their men from the forward area across the River Rapido which 21 Company had crossed on foot and in darkness two weeks earlier. On 26th March the company moved to Prezanano, a staging place, prior to further orders. A day later they were joined by HQ 4 Div Engrs and on 29th there was a dinner party there for Maj "Uncle" Egan who had served in the division for 3 years. His departure was a sad but happy occasion. Sad because he was such a capable and charming man, happy because he had earned a well deserved promotion and appointment back at headquarters in Kirkee. Uncle Egan was much older than the young platoon commanders. He was a Burma tea planter before the war and he liked his cigars. He had Spencers in Madras sending him cigars and he was particularly pleased when the company moved nearer the Americans because he could slip off and barter whisky and corned beef for cigars and butter for the mess. Accompanying him in his staff car on the mountainous narrow roads was also quite an experience. Lighting or re-lighting a cigar whilst driving and pointing out places en route was very hair raising.

On 1st April, 21 Company and HQ 4 Div Engrs moved to the Benevento area for more training at the mountain warfare school. It was another form of training to get tuned up again for the next round against the German army. The camp was located at San Giorgio Del Sano. The next six days were spent mainly doing weapon training. On 2nd April Maj RH Egan left for Taranto and India. Maj JRG Finch assumed command of 21 Company (he had arrived a week earlier). CSM GA Weeks, an extremely efficient and pleasant warrant officer who was very much respected by all ranks in the company, was also posted back to Kirkee. CSM T Meadham had already arrived to replace him.

On March 25th Maj Gen AWW Holworthy DSO MC arrived to take command of 4 Div just as it was withdrawing from Cassino. Two weeks later on April 7th the division was ordered to move forward to relieve 8 Ind Div on the Arielli-Casoli Front of the Gustav Line, the front that the division occupied prior to the move to Cassino. 21 Company moved to Castelfrentano on 8th to relieve 7 (Bengal) Field Company.

97 (RB) Field Company Arrival and the Adriatic Front.

97 Company, having undergone amphibious warfare training in the Suez Canal Zone since July 1943, sailed from Port Said as reinforcements for Italy and disembarked at Taranto at 1100 on 8th February 1944. They remained here at 16 Reinforcement Transit Camp until 25 February when they moved north up the Adriatic coast to Campomarino, 65km NW of Foggia, and just south of Termoli. Here, under the command of CRE 69 Airfields, the Company (OC Maj W Eason) carried out various tasks on bridges and diversions, maintaining roads, dismantling some Bailey bridges and strengthening and upgrading others. Lt Rhodes recalled that his Mahratta Platoon, when at Vasto, was also employed converting a secondary school, situated on both sides of the main street, into a Hospital.

When the depleted 4 Div took over from 8 Div on the Adriatic Front early in April, 21 Company moved to Castel-frentano, 7km SW of Lanciano. Here they took over the work of repair, improvement and maintenance of roads forward of Lanciano and Castelfrentano. To assist them in this work they employed 500 civilians, five companies of Italian Home Defence Infantry, six tippers and six dumpers, one platoon of a transport Company and one of an Italian Bridging Transport Company, the latter later being increased to two platoons. During the third week in April this work continued and a leave party arrived back from India after 10 months absence.

By mid-April 21 Company, having handed over to 5 (Bengal) Field Company of 10 Ind Div, was moved to No 5 Corps Bridging School camp at Campomarino where they carried out watermanship training on the River Biferno, constructed a Class 2 raft, used Folding Boat Equipment equipment to cross the Biferno, made a Class 5 trackraft, and also built an aerial ropeway for a flying bridge. At the same time they practised using Bailey bridging with piers and also with pontoons.

4 Div was by now continually prodding at the enemy all along the front, with 21 Company being engaged in opening up the main routes. 2 Platoon were near Casoli, 10 miles south west of Lanciano, whilst the other platoons worked on the nearby routes to Lama and Palena.. Each platoon had the use of either a D4 or a D7 bulldozer enabling them to open the route to Palena from the south. 3 Platoon had been held up by a blown tunnel, and in order to save time, decided to bypass it and open up a footpath up the hill back on to the main road, making it passable for jeeps and scout cars. Work on these tracks included making a Class 2 bridge, widening the track by three feet, and considerable earth work at three hairpin bends, and accepting a gradient

of 1 in 4, with a ruling gradient of 1 in 7. 1 Platoon worked on making bank seats for a Bailey bridge which was in dead ground, although the approaches were in full view of the enemy. The following day, with the platoon bivouacked nearby, bad visibility made it possible to move a D7 to the site to complete the work. 2 Platoon went on to make the jeep track passable to Palena for occasional vehicles, albeit with reversing action necessary on three hairpin bends. The work in this area continued including the construction of a 40 foot SS Bailey bridge and the dismantling of a 2-span continuous Bailey bridge, using untrained Italian civilian labour.

On 11th May, 97 Company was moved to join 21 Company at Castelfrentano, just north of the River Sangro, where it was also placed in support of 5 Ind Infantry Brigade with 4 Ind Div Engrs. Here again they were employed on road and bridge maintenance, mostly on Route 84, where they took over some of 21 Company's road maintenance and tunnel clearance commitments, and, by now, employing over 1000 Italian labourers. Whilst No 1 (Maharatta) Platoon, under Lt Croft completed the approaches to 21 Company's Bailey bridge some divisional transport, which parked in full view of the enemy attracted heavy mortar fire resulting in a 97 Company Sapper being wounded, and several of 1 Platoon 21 Company having near shaves. Meanwhile No. 2 (Sikh) Platoon of 97 Company, under Lt Ranade, was doing similar work. Lt Browning who, on 18th May had just joined the Company as replacement for Lt Rhodes, was employed with a party of sappers clearing a series of the tunnels which the Germans had partially blown near Palena, where Route 84 ran in and out of the hillside. Whilst he was walking from one tunnel to recce the next one, he came round a bend to see a German with his rifle slung over his shoulder coming towards him. Lt Browning shot at him with his pistol but the round misfired and the German ran off whilst being missed by subsequent pistol shots. (The dud round was subsequently replaced and refired quite satisfactorily! The German's number couldn't have been on it.)

Lt Wolferstan says that on 24th May he set off early to investigate the route through Penna Piedemont leading round the foothills north to Rapino and Chieti, as a way of by-passing Orsogna. He went with a 97 Company recce party and, having measured up two blown bridges, was turned back from the third by shelling. Later, with 3 Platoon of 21 Company, whilst accompanying an infantry patrol, he destroyed a dump of 76 Tellermines, which the enemy was preparing to lay. 1 Platoon worked forward of the Bailey bridge filling in some demolition chambers and also made a mule track and bridge across the River Aventino at Palena. Eventually Somerfield track had to be laid over a crater, that had already been filled with loose rubble that had refused to consolidate and which consequently had left a switchback passage unsuitable for 2-wheel-drive vehicles. When 3 Platoon were building a Class 2 bridge with material salvaged from Palena, one of the civilians on the way to work was hit by a long range sniper. This had the effect that the Italian civilian labour refused to work on the main road beyond the tunnel. Fortunately the work so far completed, had by now, made the road passable to vehicles of all classes as far as the Palena turning,

except for the tunnel. Similar work continued for several days, generally within view of the enemy who had observation posts on the nearby Marell Mountain Range. The situation did not change, however until, following the 8th and 5th Armies' successes to the west following the battle of Cassino, the enemy decided to withdraw. There was however a general lessening of enemy activity, with a perceptible reduction in the number of patrol and outpost encounters. Minefields, unfortunately, caused many casualties during reconnaissances.

97 Company move west to Route 6

On 8 and 9th June 97 Company left 4 Div and the Adriatic front to go to the west of Italy in convoy from San Vito, around the scene of the battle at Cassino to Paliano, near Valmontone, 45km south of Rome on Route 6. Here again it was employed on road maintenance. This was a tar macadam road, with traffic running continuously in both directions, nose to tail. As the traffic could not be delayed, it was impossible to rope off half the road in order to cut the potholes square. Chippings were therefore heated by burning tar soaked wood under half-drums at the road side where they were coated with tar. The chippings were then thrown into the potholes where they were rolled in by the traffic. This did not produce a perfect surface but it prevented the potholes from enlarging. The Company, still doing road maintenance, was next moved north to Pantano, 20km south of Rome. It was whilst clearing the avenue to the house in which the Company HQ had been established, that Lt Ranade was seriously wounded by a German rifle grenade and had to be evacuated to the UK. Splinters also wounded the OC, Major Eason, and Lts Croft and Browning. Maj Eason and Lt Croft went to the Field Hospital whilst Lt Browning was treated in the Unit by the Company's Medical Officer

Adriatic Front Operations

Lt Barnes' 2 Platoon of 21 Company had meanwhile moved for 10 days to the Divisional Bridging School at Campomarino to assist in the training of infantry units in assault crossings. The other Platoons moved to the Lanciano area in support of 5 and 7 Infantry Brigades of 4 Div, where 1 Platoon undertook Bailey bridge training at Mozogroga, 5 miles to the south, and 3 Platoon carried out training in mine lifting with the Brigades, whilst the Company HQ set up a Divisional Mine Museum at Lanciano.

On June 6th, when the Platoons were out on training, half of 3 Platoon was put to work on a tank track that the Brigade might require and 2 Platoon was ordered to Frisa to rest. Following a visit by the OC to Brigade HQ the rest of the Company was rapidly collected and put to work on the tank track to rush it through which was finished by 2300. 1 and 3 Platoons were then told to get what rest they could and to be ready to move at short notice. 2 Platoon was sent to report to the 1/2 Gurkhas together with a Recce Officer from HQ 4 Div Engrs.

Lt Barnes with 20 sappers of 2 Platoon started clearing the Tollo road as far as it was possible to go. They lifted 10 Telermine, one booby trapped, and carried on until work was interrupted by enemy hand grenades. They also cleared a tank track to the west of this road, during which they suffered one casualty from mortar fire. One VCO and two IORs were also attached to the 4/16 Punjab Regiment with a view to disarming charges on Tollo bridge, but could not get near enough to it.

The enemy was now pulling back and 21 Company was employed in clearing minefield gaps for the infantry, with 2 Platoon sweeping the road and verges through to Tollo. During this period they lifted 40 Telermine, made diversions around four craters by hand and two more with the assistance of a D4. Each involved laying 50 yards of Somerfield track. They also swept locations for an artillery position which was being moved forward. 3 Platoon swept the Tollo bridge area, removing 20 Telermine from the debris and made a diversion and ford past the rubble. They then prepared the bank seats for a Bailey bridge whilst under intermittent shell fire. The Divisional Commander had emphasized that no unnecessary risks should be taken which was taken to mean that the advance was to take place behind thorough mine sweeping and engineer reconnaissance with infantry protection. Unfortunately as the pace of the advance increased these principles could not be achieved. Sweeping was sometimes done by a Platoon officer sitting on the front of his jeep and observing the ground in front of him. Two bridges were reced at night trusting to luck over the matter of "S" mines and trip wires. Fortunately no mines were encountered until Vetri, and these were seen in daylight and caused casualties to the infantry lifting them.

The diversion at Tollo was urgently required for the anti-tank guns to be got across, starting at 1600. This was achieved and, in fact, four times the 30 vehicles promised got across, although the adjacent tank crossing alongside became unserviceable after only five tanks had crossed. 12 (Madras) Company was to relieve 21 Company for the rest of the night and also to bridge the next crossing at the Ariete river. In the event, however, the Brigade Commander required maximum effort to open up the road and 21 Company was ordered to restart this work at midnight with 2 Platoon, with a Recce Group, sweeping forward from Tollo. This party swept up to the Vena crossing where they removed charges from the bridge. Meanwhile 12 (Madras) and 21 Companies worked together on the road and bridge at, and beyond, Tollo. That night 3 Platoon provided a Recce Officer and sweeping party to work with the 1/2 Gurkhas as far as the river Foro. A detachment from 3 Platoon, with a party of Gurkhas, beat the enemy to the Foro bridge where they removed all firing mechanisms from it. Brigade HQ now indicated that a British Field Company was to take over the work from the Foro up to the Ripa. 1 Platoon having, due to traffic congestion marched from the Foro to the Ripa, worked forwards from the Ripa, where with the assistance of the Gurkhas they made a diversion for jeeps past a series of craters. They then carried on mine sweeping for 1½ miles and

dig out 33 unexploded charges and also made another diversion by hand. 2 Platoon whilst sweeping a harbour area for the Company by Faro bridge, removed six unexploded charges and assisted in arranging the stores required for the Ripa diversion.

Meanwhile 3 Platoon removed unblown charges between Miglianico and the Foro. Here they then assisted with work on the Foro bridge, removing fifteen 200lb charges and filling some of the cavities with brick. By 0800 they were ordered forward to the Alento river. The OC, Maj Finch, with Lt Traylor had visited the crossing where, in the moonlight, they had imagined that the banks were much steeper than they in fact turned out to be. It had been estimated that a tank crossing would take six hours to construct; in fact, it took only four. This crossing however was not considered suitable for wheeled vehicles and that a bridge would be required. The Alento crossing was then left for other units to complete. Traffic on the route continued to catch up with the engineer work. The congestion caused continued as far as the seaside town of Pescara, some 10 miles to the north, making it difficult to move up engineer transport, except at night.

2 Platoon moved with the advancing Gurkhas to Chieti, 8 miles south-west of Pescara, removing 10 Telermine at the town's entrance. Lts Hughes and Wolferston and 3 Platoon had to make do with lifts on tanks and scout cars across the Alento as, at that time, only 4x4 vehicles could make the crossing. 3 Platoon helped the Recce Group advancing into Pescara, making diversions past two craters and becoming the target of enemy self-propelled guns. The first crossing of the river here was made using an FBE raft. 1 and 2 Platoons completed a diversion on the Pescara lateral, sending one sapper off on a railway trolley car to inspect the line to Pescara. A 21 Company recce officer went 15 miles to the west of Chieti, up the Rome road, to investigate a report that the river could be diverted into a tunnel. When he got there he found that the dam had been blown.

All three platoons were then withdrawn to Chieti to deal with any charges left unblown. Early that morning all Platoons moved down to bridge the Pescara river which work was completed by 1700. They had received hardly any rest for several days and by now were very tired. The next two days were spent strengthening the piers of the bridge, and 3 Platoon was warned for a bridging task on the Saline River, 5 miles north of Pescara, but in the event this task was taken over by the Poles. The next day they cleared a field of mixed tank and "S" mines whilst under intermittent shell fire. "S" mines were in metal cases that jumped 6ft in the air when tripped, then exploding scattering shrapnel.

21 Company assembled at the Palace of Justice in Chieti where they could enjoy a few hours of rest after the terrific period of operations, lasting some seven days involving the breakthrough of the Gustav Line.

466 Corps Troops Engineers LofC Operations Jun-Sep 44

466 Corps Troops Engineers, under CRE Lt Col CAW Pegler, was created in June 1944 as part of 16 AGRE. It consisted of 1 (Bengal) Field Company, 14 (Madras) Field Company and 97(RB) Field Company, with 301(RB) Field Park Company joining later. On 12th June Lt Col Pegler visited 97 Company, and arranged for Lt JP Chalke to be attached from his HQ. He was made OC the Sikh Platoon, as replacement for Lt Ranade, with Lt Browning OC the Mahrattas and Lt Dinwoodie OC the PMs. Lt FJM German also joined 97 Company as a reinforcement at about this time and was immediately nicknamed "dushman sahib" by the jawans.

In August 466 Corps Troops were made a part of UK's 13th Corps. 97 Company, following up the forward troops, moved to Monterofondo 20km north of Rome on Route 3. After a short stop here, it again moved further north to Confini, 15km south of Terni, on a secondary route to carry out maintenance both on this route and also on nearby Route 3 from Mugliano to Terni. Whilst here Maj Eason and Lt Croft returned from hospital in Naples and Lt JPW Braye was posted into the Company. 97 Company's first death in Italy was Spr Naranjan Singh who was killed on 19th July 1944, whilst clearing mines left in the road verge near Terni. At this time the forward troops were advancing so fast that the Bailey bridging equipment stockpiles were located too far back. Lt Browning, with fourteen 3-ton trucks and their drivers, from each of the platoons, was therefore detached during late July and early August to move these rearward stocks from dumps at Confini and Perugia, near Lake Trasimeno, to a forward dump near Arezzo. As the convey required 460 gallons of petrol at each refueling, and the Bastia petrol point would only supply full jerricans on receipt of empty ones, and also convoy vehicles were not allowed in to fill their tanks, the stores truck had to shuttle between the convoy and the petrol point with jerricans until all the trucks had been fuelled and the reserve cans filled.

During this period the Company also helped guard and deliver bags of flour to civilian storage. The Company continued northwards on Route 3 carrying out road maintenance and bridge upgrading. For a short time during August, the Company also worked further to the west adjacent to the American 5th Army (which had replaced their 7th Army), on Route 2 from Lake Bolsena towards Siena and Poggibonsi. The Company HQ was generally located in various farmhouses, with the platoons living in tents near their work sites. The roads were usually fairly good tar macadam, but contained numerous Bailey bridges or low level diversions that had been built by the forward troops around blown bridges and culverts. When it was realized that all Bailey equipment would soon be required for crossing the Arno and other rivers the Company was detailed to replace them by permanent brick bridges. These bridges were usually built by civilian contractors under the supervision of platoon sappers. In most cases the design of these bridges had been supplied by the Italian Highways Dept. Where smaller gaps had been repaired by 40-gallon drum culverts, which had been bulldozed over with earth up to the original road level, short

Bailey bridges with raised end posts and ramps were built so that a brick bridge, or culvert, could be built underneath without interrupting the traffic. In one case, at San Giovanni, 30km west of Arezzo on Route 69, there were two such culverts to be replaced. Here, instead of dismantling the 80ft DS Bailey, Lt Chalke at the first location jacked it up on to reversed rocking rollers and towed it half a mile up the road behind a Scammel lorry to the next one.

In some cases the low level bridges which had been built by the forward troops were washed away by 'flash floods' and sometimes had to be replaced by high-level Bailey bridges, possibly requiring the construction of central piers. On minor roads where there was not sufficient traffic to warrant this full treatment, bulldozers were used to ramp each side of the gap and stone chippings were put down to make Irish bridges. The original bridges had all been given code names for ease of wireless recognition, such as "Dragon's Tail Bridge" and "Molta Frutta" (at Levane) due to the quantity of fruit supplied by the local population during its construction. "Flingeminia" is self-explanatory, as was "Twasabugga" at Montevachi. It is reported that the next bridge was to have been called "Twasanotherbugger" but higher authority vetoed the suggestion.

301 Field Park Company - Arrival

On 4th October 1944, 301 Field Park Company moved up the west coast from Taranto to Foglino, 40km SE of Perugia on Route 75. Once here the Company became part of 466 Corps Troops. Their task was generally to assist the field companies with the loan of auto-patrols, bulldozers etc. as well as carrying out general blacksmith work such as making spikes and dogs for timber bridging, sharpening pickaxes etc. During this period King George VI visited the front line troops, and 301 Company lined the road near Perugia and saluted as his cavalcade drove past.

Central Front Operations

With the completion of the successful advance and break-through of the Gustav line, 4 Div was withdrawn from the line for further mountain warfare and other training, prior to a move to the central front, for operations up the spine of Italy. During the second half of June 21 Company under 7 Brigade moved to the mountain warfare training camp in the Sepino area near Campobasso. In addition to unit local training, individuals were sent on specialist training courses. Lt Barnes was sent on a rafting course at SME Capua north of Naples and Lt Hughes was sent on a chemical warfare course at Benevento, east of Naples.

After the eventual capture of Cassino in May, the Germans steadily gave ground before the 5th Army. Rome fell and there followed a rapid withdrawal through Central Italy. In the van of the advance went 8 Ind Div, covering 225 miles in less

than four weeks. In three positions around Perugia and Lake Trasimeno, the enemy stood and bitter fighting ensued.

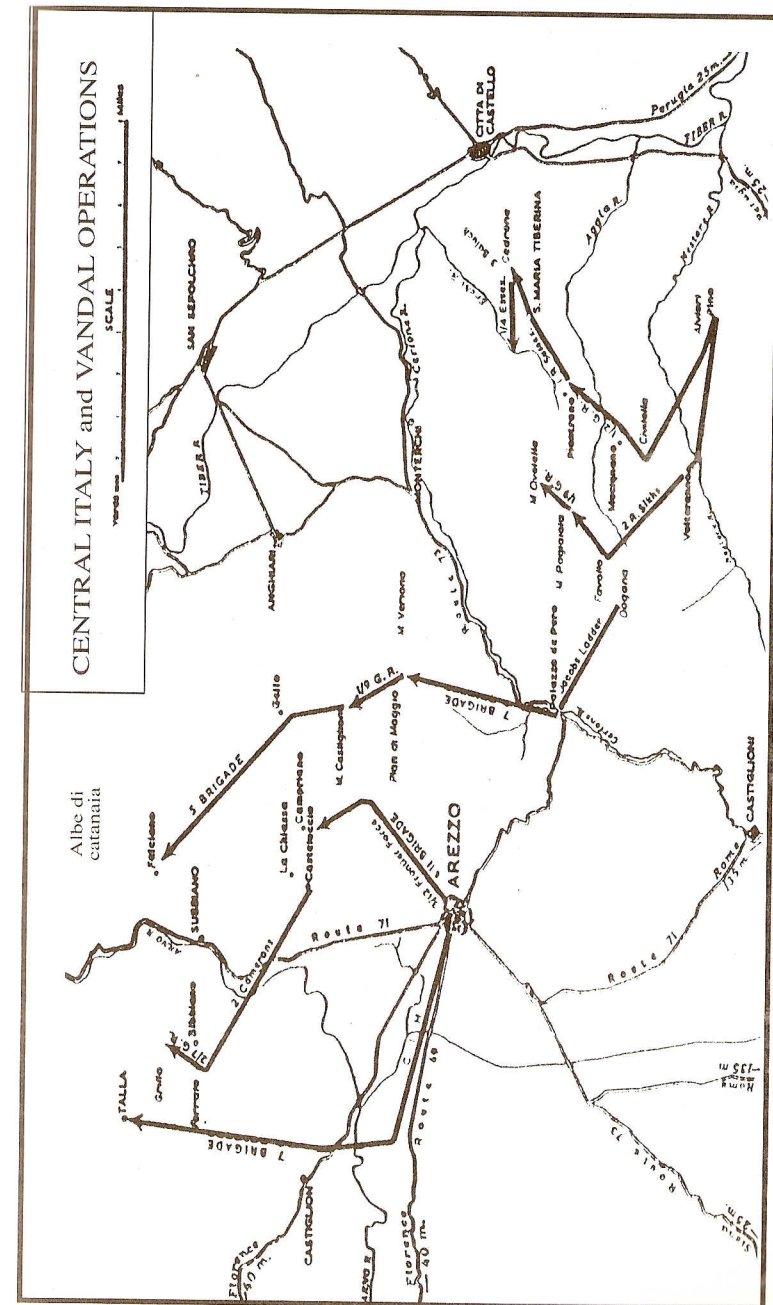
The Germans' intentions during the summer of 1944 were primarily to deny ground to the Allied armies, until it could be sold dearly. Secondly they wished to make progress more difficult as the nature of the terrain progressively favoured the defenders. Finally, they wanted to hold back the advancing Allied forces from the High Apennines until the mighty wall of the Gothic Line defences had been completed.

For the Allied infantry the role of infiltration would vary with conditions, but the usual method was to send reconnaissance patrols to explore the ground ahead. The patrols would be backed with a fighting patrol. The screen of reconnaissance patrols would infiltrate between enemy posts to pin-point German dispositions. This type of warfare suited Indian troops. Keen sight, silent movement, quick decisions and abounding courage were the counters to win in this sort of game, and those abilities Indian troops have always possessed in full. However infantry need artillery, armour and engineer support. Only by Herculean labours could such support be worked across the steep hillsides and broken defiles and only by magnificent management could the guns and their crews keep pace with the infantry's progress.

4 Div advance to Arezzo

At the end of June 4 Div was warned to transfer from 5 Corps to 10 Corps which was conducting operations in Central Italy. On 2nd July 7 Brigade led the move from Campobasso into Central Italy. 5 Brigade followed two days later. 4 Div relieved 10 Ind Div on July 8th and at once prepared to take up the running. 7 Brigade entered the forward zone at Monte Bastiola three miles west of the Tiber and the same distance south of the Nestore River. The divisional headquarters was located at Badia. 21 Company moved to the area of Badia. Lts Barnes and Hughes were signalled to return to their platoons immediately. During the evening of the 8th, 1 and 2 platoons moved, with a D4 bulldozer to Montecelli for night work to make two diversions. In addition, 2 Platoon swept the road forward to Nestore, but were held up by the enemy near Nestore. At 0300 2 Platoon rejoined 1 Platoon working on diversions. The work was harassed by shellfire throughout the night. At 0400 the work on the diversions was completed. 1 Platoon Havildar, Tukeram Shindhe, was wounded by the shell fire. During the evening of the 9th the OC's tactical HQ with 1 and 2 Platoons moved to Monte Castelli with orders to move the company to Vincenzo area as soon as the road was clear.

Next day at 0200 2 Platoon moved to Nestore after its capture. They started clearing the road forward which was being heavily shelled, especially at a diversion. 1 Platoon joined 2 Platoon at 0430 but were unable to start work as day light showed the diversion to be under enemy observation. At 0530 a squadron of Sherman tanks arrived at two blown bridges forward of the diversion that 1 and 2 platoons had been



working on but could not get through. 1 and 2 Platoons made another diversion under shell fire and managed to move 16 tanks round the obstacles. After dark 1 Platoon with D7 bulldozer completed the diversion round the two blown bridges by 0200 next morning. By first light a party from 2 Platoon swept the road of mines forward from the diversion to the blown bridge at Lignano. "S" mines and Tellermines were found and cleared. An officer reced the road to Peterlle and two blown bridges near and at Lignano. At 1100 1 Platoon plus two sections of 2 Platoon and a D7 bulldozer started work on the first blown bridge near Lignano. At 1210 the first vehicle was over the diversion. The remainder of 2 Platoon cleared the verges of mines. At 1900 a party from 1 Platoon under Capt Smith (HQ 4 Div Engrs) started work on the blown bridge at Lignano. Mines also were lifted from the area. At 2130 the diversion was completed. Much credit for the success of this rapid progress belongs to the two platoon jemadars as their platoon commanders had not returned to the company from their courses until the evening of 11th.

The next day 1 and 2 Platoons moved to Fabbacce. At 1000 a diversion on the south approach to San Secondo was made by 1 Platoon assisted by a D7 bulldozer. A party from 2 Platoon lifted Tellermines in San Secondo village under sporadic fire. No further work was accomplished during the day as the enemy still held the Syndrome feature. Lt Hughes carried out a recce during the night and found another blown bridge and crater east of San Secondo. On July 13th at 0900 1 and 2 Platoons were ordered to open up the diversion reced by Lt Hughes. They were assisted by four bulldozers (two D4s, a D6 and a D7) for this operation, which showed the importance of this route. On arrival at the site, information was received that there was a further crater below Monte San Maria. 2 Platoon were despatched, with a D6 and a D4 to make a diversion. This crater was made passable for tanks and jeeps by hand, in an hour, before the bulldozers arrived. The latter completed the diversion and 2 Platoon were withdrawn.

In the meantime a party from 1 Platoon were tasked to sweep for mines at a MT turnabout near the front line but became involved in an enemy mortar versus tank battle and were withdrawn. 2 Platoon completed their diversion by midday and both 1 and 2 Platoons were withdrawn to rest, under cover in the valley. This was but a short stay, the company comprising the OC's Tac HQ and 1 and 2 Platoons moved to Morra and arrived at a camp site during the evening.

By this time, the enemy had reacted vigorously to the seizure of Monte Cedrone. At dusk on the 13th counter attacks in company strength were repulsed by 1 Royal Sussex but, because of their insecure position, the occupying detachments were withdrawn later that night. Meanwhile the 1/4 Essex had come forward on the left of the Royal Sussex and established a continuous divisional front, constricting enemy movement on the west side of the Tiber. The Essex position threatened Monterchi and Cilerna which controlled any movement into the NW highlands. The priority now was to eject the enemy from Monte Cedrone.

At 0700 On 14th July, work started on making a track for tanks and jeeps to join up the road from Volterrano to Pallazo Del Pero over Mount Dognana. The recce officers of 21 Company and 12 (Madras) Field Company went forward to mark out the alignment. At the same time 1 and 2 Platoons of 21 Company with 12 Company, two D4s and a D7 bulldozer and 200 Italian soldiers cut a path through the undergrowth. With the aid of a spotter plane, a route was selected which defied rather than circumvented obstacles. Canadian mining squads followed with explosives blasting major obstacles on the route. The CIH provided the covering parties. Work continued on the track next day with the added help of a D7 and a D6 bulldozer. By midday one jeep had got through to Mount Dognana. Lt Hughes and a brigade staff captain then went forward to recce the road up to Pallazo Del Pero. They were shelled on sight and a shell splinter punctured one of the tyres forcing them to withdraw until dusk. By 1900 the track was opened for jeeps and by 2100 the first Sherman tank proceeded along the route. So after approximately 28 working hours a jeep and tank had emerged from Mount Dognana on the left of Monte Fouralto and the route was feeling its way towards Palazzo del Pero, the nearest point on Highway 73. For the following two days 1 and 2 Platoons 21 Company continued improving the track with the D7 and 100 of the Italians.

On July 17th, Arezzo fell and Highway 73 was open for an approach to the Alpe di Ponti. The circumstance, however, did not distract from the constructional achievement of "Jacob's Ladder" as the trans-mountain Dognana track was named. The speed of its building and the extraordinary difficulties that were overcome were bruited abroad. When King George VI visited Italy during the summer he asked to be driven over and up "Jacob's Ladder". As with any task carried out by 4 Ind Div and the Sappers and Miners, it was always a team effort by all units, Bengal, Madras and Bombay, of many castes working all hours together against the common enemy.

Operations approaching the Gothic Line

It was now necessary to regroup for the drive on Alpe di Ponti. Although Pallazzo del Pero had been cleared, the enemy was clinging to the line of Route 73 to the north and east. 21 Company moved to Rigutino, south of Arezzo on July 18th. 3 Platoon, which had been left behind in Sepino on L of C duties, having rejoined the company the day before. Next day 1 Platoon repaired a blown bridge forward of Arezzo. 3 Platoon were mine lifting forward of the bridge but were heavily shelled and compelled to withdraw. At midday the OC (Maj Finch) and Lt Hughes went forward on reconnaissance. Lt Hughes met two enemy soldiers, killing one and wounding the other, with a burst of tommy gun fire. The company tasks for the next two days consisted of mine clearance and maintenance of roads in the forward areas. 1 sapper of 2 Platoon had his foot blown off on a Schümine. Many Schümines were lifted. At about the same time as this work was being carried out, CIH, which Lt Barnes and 2 Platoon NCOs had instructed in mine clearance in March, took over

patrol duties along Route 73. On 22nd and 23rd July 1 Platoon worked on improving roads in San Polo - Antria area whilst 2 Platoon and a detachment of 3 Platoon worked on opening the road to Mosciano. During this work a D7 was damaged by a Schümine.

During the night of 23rd Lt Hughes made a reconnaissance forward to see whether a track from Verria to L'Antecchia was passable for jeeps. Four sappers from 3 Platoon accompanied a 3/12 Frontier Force fighting patrol to clear mines, should the patrol be unlucky to hit a mined area. On the same night Lt SG Young of the CIH led a patrol of Dogras to occupy a ridge. When nearing the objective, Sowars Ditto Ram and Shiu Pershad were blown up on Schümines, each losing a leg. Lt Young ordered his men to stand fast while he crawled across the mine field towards the wounded men. He dug up three mines with his hands and reached the stricken soldiers unharmed. On lifting one of them to carry him to safety, he trod on a mine. Both his feet were blown off. He dispatched a messenger for sappers and stretcher bearers and bade everyone remain without movement until day broke. Five hours later, when the rescue parties arrived, Lt Young was still conscious and in command. He died from loss of blood before reaching hospital. Ditto Ram likewise died after having crawled to his wounded comrade and bandaged him. For their outstanding gallantry and self sacrifice, both officer and man received posthumous awards of the George Cross. Lt Barnes and 2 Platoon, who had made friends with this officer and men of the CIH during the training course, were very grieved to learn of their deaths.

On the next night 11 Brigade moved against Campriano, five miles north of Arezzo in the rolling ground along the haunches of the eastern massif. 3/12 Royal Frontier Force Regiment (RFFR) with 3 Platoon in support battled forward against bitter opposition. At dawn the situation on the right was precarious whilst on the left the brigade objectives were finally overrun. The enemy was still in possession of the crest of the ridge behind the village. The sharp fighting had cost 138 casualties. 84 German dead were counted and 20 prisoners taken. Whilst this operation was in progress the 2/7 Gurkhas advanced on the left flank of the RFFR and without difficulty established themselves at Castellaccio, 3000 yards west of Campriano.

3 Platoon had a lance-naik and a sapper attached to each company of the RFFR to assist in mine lifting during the operation. Spr Tara Singh was killed and two of the others were wounded.

Throughout the 25th July the divisional guns thundered and King George VI paid a brief visit to talk to divisional representatives and, from an observation point at Arezzo, watched a concentration shoot in support of 11 Brigade at Campriano.

The same day Lt Trayler, with a detachment of 3 Platoon, tried to find a tank crossing on the road to Campriano. They were pinned to the ground by enemy fire for an hour and a half. That night 5 Brigade thrust across 7 Brigade's front. Early next morning

1/9 Gurkhas stealthily approached Monte Castiglione two miles north of 1/2 Gurkhas positions on the Piane di Maggio. When the men from Nepal attacked with their kukris the Germans scattered for safety, dropping their weapons in fright. During the night 2 Platoon 21 Company moved to a camp near Misciano to open a jeep track to Petramala, in conjunction with 4 (Bengal) Field Company. Operations on the divisional front now became fluid as these rapid thrusts upset the enemy's plans for an orderly withdrawal. However, the ability to move forward was hindered by the lack of good roads and tracks. On 26th July three Sherman tanks were stuck, subsequent to the Campriano operation, because the road behind them had collapsed when the last tank moved through. 1 Platoon, in attempting to repair the track, was shelled off it having one lance-naik and one sapper wounded. The same night, Lt Hughes, with a D4, in attempting the same task was shelled off the work too. The noise of the D4 attracted immediate enemy attention.

On 27th July the company forward camp area was shelled at periods during the day. One man was wounded in the evening. The camp was moved to better cover. During the night, 1 Platoon worked on repairing the track to Utieri with 3 Platoon making a tank track from Laverna through Antecchia to Campriano. The following day, with the further assistance of 1 Platoon, the tanks got out of Utieri. During the night 2/7 Gurkhas took over Campriano and the RFFR patrolled forward and occupied the small hamlets of Terrio and Perriecchia. The enemy still stood stubbornly and any attempts to improve positions led to retributive fire. To try and get around them the next day, 1 Platoon moved to join 2 Platoon to open the valley road from Petramala.

Operation Vandal

On the last day of July the corps commander announced a general offensive for the purpose of securing Bibbiena on the main Florence highway 20 miles north of Arezzo. Here the Arno valley swung into the west around the north shoulders of Prato Magno. At this point a valley also came in from the north east running down the main spine of the high Apennines, on whose slopes the Gothic Line was under construction. The capture of Bibbiena therefore would open the road to Florence and would allow 10 Corps to close up against the main German defences. The new operation (to be known as Vandal) called for 10 Ind Div to storm the mountain block between the Arno and Tiber valleys, while 4 Ind Div gave a firm western flank and in 'similar fashion' eject the enemy from the Prato Magno massif.

Although most of 21 Company moved back into Arezzo on 31st, that night a detachment from 2 Platoon with the aid of a D7 bulldozer, made a diversion round a blown bridge which was under enemy observation. Next morning 1 and 2 Platoons moved to work with 4 (Bengal) Field Company on 5 Brigade axis in the area of Monte Castello. Shortly afterwards it became apparent that the enemy had withdrawn on 11 Brigade's front. 3 Platoon was moved up to open diversions around two blown bridges on secondary routes needed for the Vandal operation. Lt Hughes while

carrying out a recce with 3 Platoon was wounded in the leg by a rifle grenade fired by an enemy withdrawal rearguard. At midday 2 Platoon moved back to Arezzo. 1 Platoon followed in the afternoon. In the evening the OC's Tac HQ moved with both platoons to Terrio. During the night and early next morning 2 Platoon, with a D7, partially made routes across or around five craters that had been liberally sown with mines. Later in the day 2 Platoon made a nullah two-way crossing.

Meanwhile 1 Platoon was working on a diversion round a blown bridge. Another sapper unit about a mile away sent an uncoded progress report giving the wrong map reference which happened to be the location where 1 Platoon were working. Proof that the enemy were listening in soon arrived in the shape of a stonk of shells. One sapper was slightly wounded.

3 Platoon, which, with the main body of Company HQ, had also moved to Terrio during the night, started work on a second route for return traffic from Monte Giori. The work was limited by the enemy shelling armoured units in the area. Next day, August 3rd, the platoon had a brush with an enemy infiltration party when moving to work and Spr Ganga Singh was killed.

That evening 2 Platoon was put under command of 2 Camerons, who led the 11 Brigade advance in the Castelluccio area, to make a one and half mile jeep diversion to by pass the blown bridge at San Martin. Further improvement of the track next day was impossible under observed enemy shelling. Nevertheless 2 Camerons by moonlight secured Bibbiano and Monte Ferrato. 5 Brigade with 1/9 Gurkhas and 1/4 Essex on the opposite (east) bank of the river below Alpi di Catenaiia kept pace and Falciano was captured.

On the afternoon of 4th August 3 Platoon moved round to open the road from Castelluccio to Vecchia. The work was not completed owing to the D6 bulldozer being knocked out by an unlocated mine. However, a 10ft bridge, with Bailey transoms and decking, was completed opening a route at Pieve.

On 5th August two companies from 115 Panzer Grenadier Regiment supported by assault engineers recaptured Poggia del Grillo, but were held there. Meanwhile 7 Brigade had come forward on the left flank of 11 Brigade and had moved up to Castiglione on the road that skirts the southern spurs of the Prato Magno. 1/2nd Gurkhas on a parallel line of advance to the west chased German outposts from Poggio la Cesta. Operation Vandal had opened well. After fierce fighting 10 Ind Div had destroyed the defenders on the crests of Alpe di Catenaiia. On the 4 Ind Div front, the three brigades, with moderate losses, had bitten deeply into enemy territory.

Also on the 5th, 21 Company attempted to start work on route 71 at Castel Nuovo but found it impossible owing to enemy observation and shelling of the road. Lt Trayler was wounded by a shell splinter. 1 Platoon worked on two blown culverts

north of Subbiano. The removal of the mines and marking a diversion were completed without enemy disturbance. Next day 1 Platoon with 3 Platoon of 4 (Bengal) Field Company started making a make a track from Vecchia to Vezza passable to tanks. The undisturbed work was completed by 0300 the following day. 2 and 3 Platoons constructed a 100ft DS Bailey bridge at San Martino during the 6th. Next day 3 Platoon move to join Company HQ at Terrio. 1 Platoon (Mahrattas) left camp at 2100 to open the road Lariassa to Podcarra for tanks by first light in conjunction with 11 Brigade's attack on Grillo and Pianole. Mine sweeping of the last half mile was much hampered by shelling. During the following day 3 Platoon opened a jeep diversion past a blown culvert to assist 3/12 RFFR. 2 Platoon worked on two diversions near and at Pontecaliano to open the road to Sibbiano on the east side of the River Arno.

Between 9th and 12th August 21 Company concentrated just south of Arezzo prior to moving to a rest area south of Lake Trasimene and west of Perugia. In the 32nd day of the operation 4 Ind Div had advanced 25 miles. In continuous contact with the enemy, with occasional eruptions of savage fighting, the division had incurred 1043 casualties. 21 Company played its part in the continuous day and night operations in supporting the three fighting brigades. Casualties occurred mainly through shell fire and mine clearance, with the wooden box and Schümines causing many casualties due to being non metallic and difficult to detect.

By 14th August 4 Ind Div had concentrated to the west of Perugia, but the officers and men were only able to enjoy the amenities of this playground countryside for three days. 21 Company used their break in operations in a relaxing but very important "make and mend" programme not knowing when they would again be back at the enemy. Visits to Perugia and Assisi were most enjoyable, as were the company 'bara khanas' and 'tamashas' organised by Sub Mangal Singh, Jems Mohd Riaz and Pandurang Deshmulk for all ranks of the company.

Gothic Line Operation August to October 1944

4 Div had only a few days rest after their part in 10 Corps' Operation Vandal in the first week of August. Their next entry into the battle area was with 5 Corps again on the Allies' Adriatic front, where the division had been in June. Since then the enemy had withdrawn along the Adriatic coastal area across the rolling ridges until his right flank encountered the foothills of the Apennines. As the foreshore narrowed, resistance stiffened. At Pesaro, 42 miles north of Ancona, the Foglia river slipped into the Adriatic through a broad gravel watercourse. This river bed had been chosen by the enemy as a moat to front the Adriatic outworks of the Gothic Line. When 4 Div moved forward on August 17th it was directed towards the junction of the coastal and the mountain defences on the foothills of the Apennines. On the 18th the division started concentrating at Sigillo on Route 3 (Flaminian Way) on the eastern slopes of the Apennines 25 miles north of Perugia. Three days later 21 Company

moved to a site half a mile south of Scheggia which placed them in the forward part of the concentration area.

7 Brigade moved along the axis of Route 3, while 5 Brigade with the divisional jeeps and mule train proceeded on a parallel axis across country. One battalion of 11 Brigade went forward to patrol the left flank. CIH covered the ground between the two brigades. It was discovered that the enemy had excelled himself in his demolitions along the Flaminian Way. Every bridge had been blown and the road blocked by craters, trees, demolished houses and concrete slabs. The divisional Sappers and Miners laboured incessantly to effect sufficient repairs to let the traffic through and it was only due to their dogged and sustained labours that 4 Ind Div was able to maintain the forward momentum.

21 Company supported the advance by making a road for divisional transport from Cantaino to Pianella. 2/7 Gurkha Rifles were supposed to provide protection but denied receiving orders to do so.

Work restarted on 25th after a night recce had found a suitable line to follow for the diversion road. The recce confirmed that apart from a blown bridge at Pianella and some ineffective craters, the road was clear to Cagli, using the existing diversion and ford past a blown bridge after ten Tellermines had been lifted. The road was opened to 15cwt trucks by dusk, a total distance of 6 miles. The specifications were a maximum up gradient of 1 in 4 for 100 yards, general gradient 1 in 6, maximum down gradient 1 in 3, general down gradient 1 in 8. The road was to be used in one direction only, with a width 12ft but 14ft on corners. By 1000 next day it was open to all traffic. 1800 vehicles crossed in 36 hours the maximum rate being 100 vehicles in 1 hour. Also during the day the diversion was widened at one point on the route and a further diversion was made at Cagli. Maintenance of the diversion continued on 27th and B Echelon transport moved forward to Pianella.

On 28th August, 21 Company moved to Acqualagna and commenced next day, with the assistance of a D8 and a D6 bulldozer, to open a track from Sagrata to Fermignano to serve as a return route to Cagli for divisional maintenance. The following day the company, with two D4 bulldozers opened a Fermignano to Urbino route for divisional down traffic. A 110 foot TS Bailey bridge was constructed on this route.

Between 26th and 29th the division had crossed the river Metauro and seized the southern end of Monte Cesona, a narrow-backed ridge system which stood 1500 feet above the northern bank of the river. The 1st Battalion Royal Sussex entered Urbino. The 20,000 inhabitants lined the streets and gave voice in an excited welcome. (Urbino is perched on a pinnacle above the surrounding ridges. It was the birthplace of Raphael.) 7 Brigade had reached Fermignano, also on the Metauro river. 5 Brigade linked up with 139 Brigade of 46 British Div. Both divisions had closed up

against the outworks of the Gothic Line. The enemy defences followed the north bank of the river Foglia six miles beyond Urbino, where the river describes a series of meanders along the base of a long ridge which ran for four miles to the east. On a spur in the centre of this ridge, with river loops on either side, stood the hamlet of Monte della Croce. A mile further north on still higher ground stood Monte Calvo in Foglia. Behind Monte Calvo, a white ribbon of road wandered along the rising crest of the hills for three miles to Tavoletto where the spur merged into a transverse east-west system. On this main spine Monte San Giovanni, three miles west of Tavoletto and Monte Gridolfo and five miles to the east, marked the enemy's main battle positions. On both sides of Tavoletto, the advantage of ground had been studiously exploited by the enemy with a variety of fortification devices - anti-tank ditches, wire obstacles, machine-gun pits, forward sniping guns and trench systems. Thickly sown minefields covered all approaches. German counter-attack forces waited in sheltered reserve areas in the rear.

First phase 29th August - 5th September

As 4 Div thrust forward from Urbino only rear guard resistance was encountered at first. On the night of 29/30th August the enemy defences between Monte Calvo and the Adriatic were bombarded. 5 Brigade advanced and encircled Monte Calvo. Late next morning, the assault on Monte Calvo began. Fighter bomber groups added their metal. The enemy resisted fiercely and 4 Div supporting tanks were disabled on minefields. However by nightfall 5 Brigade securely held Monte Calvo and had established a protective flank to the west. On 1st September 5 Brigade took up the battle again thrusting to the north and by nightfall they had reached the crest of a ridge 1000 yards to the south east of Tavoletto village.

21 Company were not involved in supporting the attacking Brigades but played an important role in ensuring that the route forward was opened for artillery and supplies in the forward area. 2 and 3 Platoons built an 80ft DS Bailey bridge and approaches on the main road from Urbino to the Foglia river. A complication was that the bridge had to be skewed, after launching, to provide a reasonable approach. By September 2nd September the enemy had recovered from 5 Brigade's sudden incursion into his defences and had rushed forward substantial reinforcements, including self-propelled guns and mortar groups, to buttress his threatened right flank. His main defence was to be the flank bastion at Monte San Giovanni.

On 3rd September, 21 Company moved forward to camp close to the river Foglia and for 3 Platoon to open a diversion across the river. The level of the water in the river was now low. That night 11 Brigade advanced through 5 Brigade and captured Tavoletto, with 1 Platoon in support to open up the main road for tanks. The platoon worked as far as the outskirts of the village by dawn, lifting a few mines from the road. They were halted by snipers and heavy shell fire and were withdrawn at 0800. 3 Platoon were on stand by to take their place. By the next night 11 Brigade

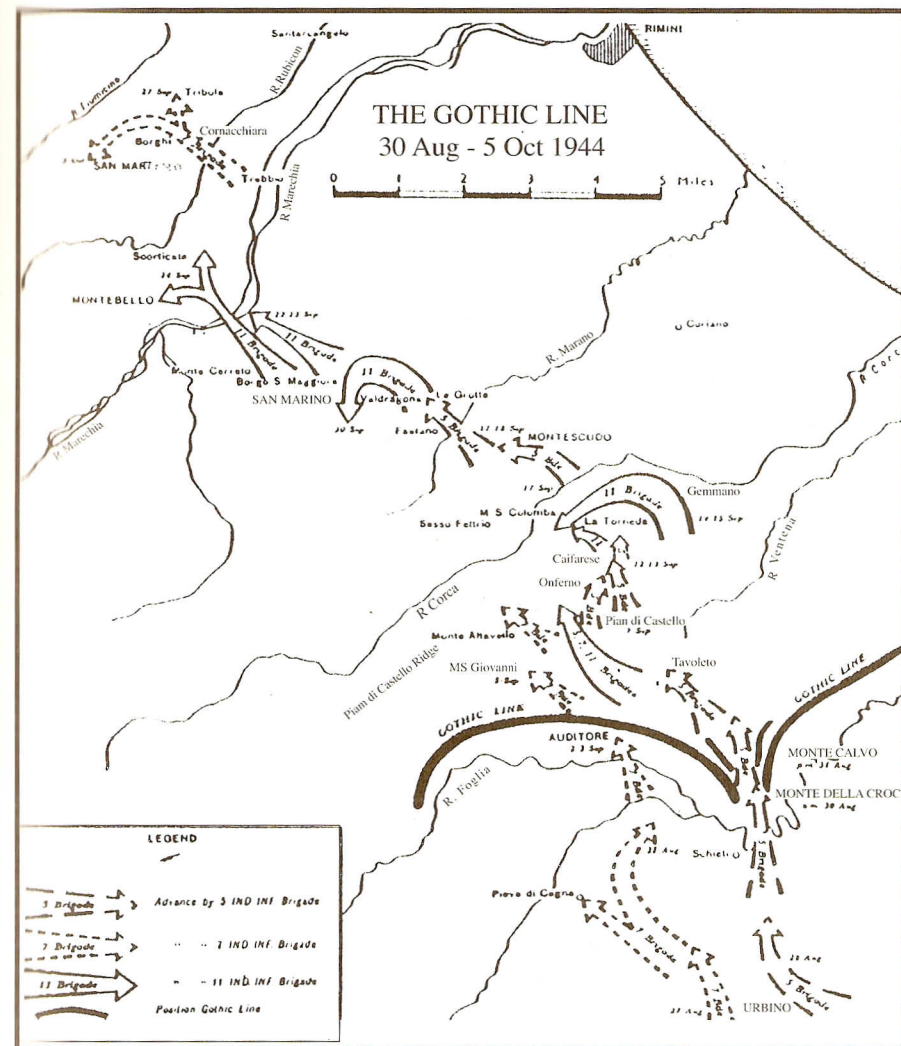
consolidated in the Tavoleto area. 3 Platoon had the task of checking the village for mines and clearing the route through it. This was completed at dawn under intermittent shell fire. Next day Lt Hughes visited the forward company of 3/12 RFFR and reced the road to Castelnuevo, finding it free of demolitions and apparently free of mines. The enemy who must have been able to see Hughes during the whole course of his recce, did not open fire presumably so as not to give away their own positions.

Second phase (6th - 13th September)

On the night 5/6th September 11 Brigade struck at Piandidi Castello by-passing Castelnuevo. They seized the village of Poggiale. 2 Platoon with a D7 bulldozer repaired a crater near Tavoleto. They also checked the road again as far as the river Ventena. No mines were found. During the day tanks made their way across the flooded river and a combined infantry/tank assault group attacked Castelnuevo. By 1500 3/12 RFFR had won this objective. Four full scale counter-attacks followed, each of which was thrown back, the last with the aid of captured Spandaus. Unfortunately the tanks were unable to leave the road to move up on to the feature to assist consolidation. On the next night 1 Platoon made a ramp for tanks to get off the road at Castelnuevo. Infantry protection for the work did not arrive. Work was temporarily suspended twice by enemy fighting patrols. Owing to heavy rain during the night, tanks were restricted from using the ramp until midday. They then reported having some difficulty. 3 Platoon was sent to assist and by 1600 the tanks were across the ramp and up on to the feature to strengthen the RFFR Castelnuevo position. During the next night, 7/8 September, 2 Platoon carried out further improvements on the tank ramp without interference from the enemy.

On 8th September 1 Platoon and 3 Platoon opened a new diversion over the river Foglia. Previous diversions, were out of commission due to the heavy rain, with the river now in flood. Next day 3 Platoon made a new tank diversion around Castelnuevo cemetery.

For the next three days up to the night of 12/13 September, 21 Company rested in the forward area prior to the major 8th Army attack. 4 Ind Div was ordered to continue the assaults on Cafrarise and Onferno. 46 British Div's role was to capture the strong Gemmano position. By dawn 4 Div had gained Schiano to the north of Onferno. 46 British Div had been held in front of Gemmano but had made considerable progress towards Monte San Colombo. The dawn situation on 13 September had shown a number of subsidiary gains but the key bastion of Gemmano was still firmly in the enemy's grasp. 46 and 56 British Divs had now attacked Gemmano eleven times! The corps commander at this juncture decided to commit 4 Ind Div against this position. The new assault was set down for the night 14/15 September.



Third phase (14th - 20th September)

During the day of the 14th 1 Platoon worked on opening the road along the Ventena river valley with a view to connecting up the Onferno road with Castel Farese when the tactical situation permitted. The assault by the Camerons started at 0300 on 15th September. Ninety minutes before the attack, Zollara, a tiny hamlet on the left on Gemmano, received the full blast of 2000 shells. At 0300 all field guns joined in a barrage ahead of the Camerons who were to advance across the crest of the spur to the south of Gemmano. By 0350 the Camerons were in Zollara and by 1000 with armour in the van they were firmly ensconced on the crest of Gemmano ridge. 900 Germans perished in defence of this key position. The effect of this success was a general enemy withdrawal in the area to the north of the river Conca.

Earlier on the morning of the 15th, 3 Platoon were sent to carry out essential repairs on the main road in the Zollara area but found little to do and no mines. 1 and 2 Platoons with 120 Italian troops, a D7 and D4 and 1 Platoon of 4 (Bengal) Field Company opened the track to Castel Farese, to all traffic, by the evening. This track was very much a dry weather route and only for temporary use. Next day 1 Platoon with a D7 bulldozer made a down road from the Gemmano feature to open a traffic circuit through Tribio. Two days later (18th) 3 Platoon with Italian labour (approximately 120 strong) and the assistance of 1 Platoon 12 (Madras) Field Company made the nullah road two way over the whole of its length.

On 19th September 21 Company, Tac HQ and all three platoons moved over the river Conca to camp by the river Marano. On the 20th, with a D4 and a D7 bulldozer, two footpaths were widened to 12ft to take all traffic, so avoiding the main hilly road to the river at Faetano.

At first light on 21st September 1 Platoon moved up to open the road into San Marino. 25 box Holtzmines and Tellermines were lifted and a large crater was made passable for vehicles. The crater area was later improved to the full width of the road by the arrival of a D6 bulldozer. As soon as the crater was passable 2 Platoon went through to make a diversion past a demolished bridge. The day was wet and a heavy mist allowed work to proceed, without being observed and shelled by the enemy. Lt Hughes, taking advantage of the mist, carried on to recce the road down to the Marechia River where he found a diversion over a dry nullah and also took three prisoners of war in the process. For his daring reconnaissances on 5th and 21st September Lt Hughes was granted an immediate Military Cross by General Sir Harold Alexander Allied CinC Central Mediterranean Forces. The citation states:

"On 5 September the enemy had retired behind the river Ventana on to high ground overlooking Castelnuovo. Information on the enemy dispositions was scanty. It was known from two infantry patrols that had crossed the river earlier that day, that the area was well covered by enemy small arms fire. Lt Hughes was sent to

visit the forward troops to get what information he could of the road to Castelnuovo. Although he had been given orders, given for his own safety, not to go further forward, this officer realising the importance of getting the information, and failing to get what was required from the forward elements, disregarded these orders. At extreme personal risk, Lt Hughes carried out a recce of the road to close under Castelnuovo itself. The accurate information he obtained was of the highest value. It was due to this alone that tanks were able to move up the next day and to give the enemy close support in their successful action, action that resulted in the capture of the feature. It is emphasised that it was not possible to do the recce from cover. It was done in full view of the enemy, in the belief that he probably would be unwilling to disclose his dispositions by firing on such a small recce party.

"Again, on 21 September, Lt Hughes was ordered to make an engineer recce of the Marecchia river. San Marino had only been occupied the previous night. It was essential to gain information of the river crossings, taking advantage of the poor visibility then pertaining. Lt Hughes left his escort of the pioneer platoon of 3/12 Royal Frontier Force Regiment to clear the road of mines, and with two sappers only, pushed forward to a village 600 yards from the river. Having rounded up three Germans here, he was told they were also in some strength on high ground some 400 yards to the west. He disregarded the implications of this information and continued his recce of the area, bringing back valuable information of the blown bridge. A few hours later, the scene of this officer's activities became a battle ground.

"These two examples of Lt Hughes' determination to obtain vital engineer information at all costs and with complete disregard for his personal safety, are not only in accordance with the high tradition of the engineer arm, they show also that the officer has moral and physical courage of a very high order. By his initiative, skill and determination, he materially influenced the course of the battle."

Throughout the advance phases of the Italian campaign many forward reconnaissances were carried out by the junior officers of the divisional engineers. Not infrequently they were the first allied soldiers following up the German withdrawal. Capt (then Lt) Wolferstan relates: "On one occasion I was out on patrol in my jeep when a man jumped from the roadside and waved us down. I suspected a trap and warned my driver to take off if it was an ambush. The man yelled out in a strong Welsh accent 'My name is Jenkins. Look you, I'm an escaped POW'. 'Jump in and welcome' I said. The Italians had been sheltering him in a nearby village."

San Marino

Large white crosses on the ground indicated the boundaries of San Marino state that claimed independence and neutrality which the population hoped would be

respected. The Germans had taken no notice of this boundary and occupied the town which is perched on a high mountain ridge, providing them with a good vantage point.

Early on 21st September Maj Gen Holworthy accompanied by Brig Saunders-Jacobs of 5 Brigade made an official entry into San Marino an independent country not at war with anybody. General Holworthy provided a lively account of the proceedings: "I was taken to the Governor's Palace where I was met by the San Marino Military Guard and escorted into the sanctum sanctorum. The Captain Regent was seated beside a large table. He wore a tailcoat, butterfly collar, pepper and salt trousers and elastic-sided boots. I was in shorts, khaki shirt, battle-dress blouse and duffel coat. With the aid of an "American speaking" local girl, we discussed matters. I told him that refugees had to be kept off the road until military movement was finished. We wanted local labour to mend road demolitions. We had come to kick out the Boche and not take over the Republic." "We then adjourned to the dining room where I signed my name in the book. We had some wine. I was asked to state what I desired. I said I wanted a headquarters for myself and 1 Brigade and some stamps. I was allotted a villa and was told all the stamps of the republic were at my disposal. I could have anything I wanted. The Captain Regent expressed his gratitude to the Allies for their restraint in not bombarding the town. We then shook hands warmly and I went back to see how the battle was going."

During the night of 21st September, 2 Platoon having earlier completed the diversion on the road to San Marino, sent a party on to work on the nullah crossing recce'd by Lt Hughes. The work was hindered by the enemy, particularly by a spandau post firing on fixed lines into the area where the platoon was working and searching for mines. Whilst Lt Barnes and a detachment were working in one area, Jem Mohd Riaz and two sappers decided that the Spandau post was making work impossible. They decided to go forward and by stealthily encircling the enemy position, knocked the enemy out with grenades. They returned to the platoon and Jem Mohd Riaz reported to Lt Barnes what had been achieved. The work progressed peacefully until daylight. Jem Mohd Riaz was awarded a Military Cross for his initiative, skill and bravery. (The full citation is missing from the London Public Record Office.)

In the meantime, it was decided by the CRE to replace the San Marino blown bridge with a 90ft Bailey bridge. The bridge was ordered up but did not start arriving at San Marino until well after dark on the 21st. During the night, 3 Platoon unloaded the equipment except for three lorry loads which were not found until dawn. Fortunately they were unloaded and sent away by 0630 without interference by the enemy. Unlike the mist situation of the previous day, it was the early morning sun shining just above the site and towards the enemy positions which hampered their observation. 1 Platoon, with a working strength of only 32 jawans moved down to the bridge site at first light and completed the building of the bridge, unmolested, by

1400. Some slight shelling on the road, when the platoon returned to camp, did not cause any casualties. The completed bridge was unique in that it was the only Bailey bridge built in a neutral country during the war.

Final phase (21st September to 2nd October) crossing the Marecchia and the Rubicon

Next day, 2 Platoon stood by to assist tanks to cross the Marecchia river on to the Montebello feature, in close support of the infantry. From a combination of ground recce and study of airphotos a route was selected, which the tanks used later in the day. On 24th September the enemy, under constant attack, withdrew behind the River Rubicon. Here Caesar crossed this river from north to south after one of his battles. This time it would be 4 Ind Div crossing in the opposite direction. 2 Platoon with the assistance of an armoured D7 and a D4 bulldozer checked the road for mines. They made a diversion over the Marecchia river and a separate return route north of the demolished railway bridge. They also made a further diversion with both machines past another demolished road bridge. 3 Platoon checked another road for mines and found 1000 civilian refugees living in a railway tunnel. They were pleased to be liberated. The platoon then completed the road circuit to Scorticata, Gemmiano and back along the lateral, lifting many wooden Schümines and Holst mines.

During this time, the infantry, after very stubborn fighting by the Germans, consolidated the divisional bridgehead to the west of the river Marecchia. At this juncture, it was announced that the enemy had made a general retirement on the coastal front. However, they stood stubbornly along the divisional front. During the night 24th/25th, a company of 1 Royal Sussex crossed the Marecchia and seized Gemmiano. On the next night, a second company pushed through to Cornacchiara, two miles west of the river Marecchia.

On 25th September 1 and 2 Platoons made another diversion along the line of the river bank. Schümines and Tellermines were lifted. 1 Platoon were shelled by enemy self-propelled guns in the Secchiano area. One sapper was slightly wounded. Lts Hughes and Barnes in their recce along the banks of the Marecchia were informed by an Italian civilian that there was a group of enemy hiding in the house near where they were approaching. Lt Hughes with sappers covered one side of the house and Lt Barnes and four sappers covered the rear of the house. They fired a few shots at the windows of the house and the enemy, comprising a German warrant officer and nine German soldiers plus three Russian POWs (forced labour) were captured.

During 26th/27th September the infantry continued their attacks on the enemy strong positions. The enemy, exhausted by successive failures to hold strong positions, relinquished Tribola and Reggiano. On the 28th September the Camerons despatched

a strong patrol across the river Rubicon to San Giovanni. At the same time, 3 Platoon 21 Company, in support of the CIH covering the left flank of the division, checked the road to Uffogliano for mines and also opened the road to Libiano. They made two diversions, along disused railway alignments, passable to jeeps only. No mines were found. 1 Platoon checked the road to Secchiano and Alessio lifting a few mines and finding a crater. For the next two days, apart from a recce by Lt Hughes to Mercantino and thence the road to Porticara, there was nothing special to report. The rain, however, over this period was exceptionally heavy, making movement of vehicles impossible in places.

In the very early hours of 1st October the Camerons and 2 Royal Sikhs made a fresh attack on enemy positions behind a barrage in which 306 guns fired 22,000 shells in three hours. By 0330 the Camerons had reached their objective and were enjoying sniping practice at numerous Germans who bolted like rabbits across their front. The Sikhs reached Borghi at 0730 and the Royal Sussex on the right seized Reggiano. That day 3 Platoon 21 Company working from the Marecchia river, opened up road towards Montemaggio. A detachment of 4 (Bengal) Field Company worked in the opposite direction to help completion. Improvised anti-tank mines consisting of Schümines on top of 4 kgs of prepared charges were lifted. Lt Cooke, 21 Company reinforcement officer, carried out a reconnaissance of the crossing of the river Rubicon and was fired on by the enemy with a Spandau.

For the last 10 days of September, bad weather had slowed down the advance. Everywhere the low ground was a sodden morass, the crests were wind-swept and storm-beaten. For the assault troops life was misery; in the back areas continuous day and night labour barely managed to keep minimum supplies moving to the firing line. On 2nd October 3 Platoon lost Spr Navita Singh, who was washed away and drowned in the floods. Two days later the company moved to Monte Giardino, south of San Marino. 3 Platoon spent the day on road work near Verruchio.

It was now 37 days since 4 Ind Div had moved out of Sigillo and 32 days since it opened the battle. The division had advanced 60 miles of which 25 miles had been in constant contact with a desperately resisting enemy. Casualties had been heavy, amounting to 1892 all ranks, including a high percentage of junior officers. To advance up a fire-swept hillside, surge over the crest, descend the reverse slopes in full view of the enemy, pick paths through deadly mined ground along the river banks, splash through icy torrents, scarcely colder than the pelting rains, work up another slope against another crest still held by the enemy - such was the recurrent log of 4 Ind Div's five weeks' drive along the Appennine foothills. The bad weather at the end of September finally bogged down their advance. 10 Ind Div was on its way forward to take over, but there was still much for the divisional sappers to do in maintaining the routes in the forward area, to enable all the transport involved in the relief to move, before handing over to the incoming engineer units.

During early October 21 Company had to move their camp in the Rubicon valley. There was difficulty in getting vehicles off the road owing to the state of the ground all available space being occupied by gun areas. During the night of 9th and 10th of October 2 Platoon unloaded a 140ft Bailey bridge which 1 and 3 Platoons constructed over a damaged arch bridge of the Rubicon and completed it without base plates or end posts by midday. Next day the company moved to Secchiano in the Marecchia valley. The main tasks were to repair the road to Secchiano and to maintain a vehicle-ford over the river Rubicon.

Over the next three days 2 Platoon repaired two bridge demolitions on the approach to Mercatino town with two 30 ft SS Bailey bridges and made a short diversion on the north exit from the town. This became the final operational task for 21 Company in Italy.

4 Div Final days in Italy

On October 15th 21 Company moved in a 4 Div convoy to Lake Trasimene area north of Rome. To provide continuity of engineer intelligence, two officers, Lts Barnes and Guilbride, were loaned to 10 Div Engrs for six days. They rejoined their units in billets in the Sinalunga area east of Lake Trasimene. Between 16th and 26th October the units rested and recuperated sending leave parties to Rome and Florence. Lt Barnes was transferred from 21 Company to the CRE's HQ for field engineer duties. Lt Cooke took over 2 Platoon which Barnes had commanded for the whole of their Italian operations.

On 27th October 21 Company moved with 11 Brigade to Taranto arriving there on 30th after night stops at Rome, Caserta and Bari. For the next three weeks individual training and preparations for the move to Greece were the main daily routines. An advance party left for Greece on 17th November and the main body a week later.

The division had been in Italy for very nearly a year of hard fighting and difficult movement and conditions. The internal security duties, which they were about to carry out in Greece were, by comparison, a comfortable rest. Field Marshall Sir Archibald Wavell summarised the impressive record of the division at the end of 1944: "In five years the division fought nine campaigns, travelled more than 15,000 miles, suffered over 25,000 casualties and captured upwards of 150,000 prisoners. The gallant costly assault at Cassino against defences even more formidable than those at Keren (Eritrea) or Mareth (Tunisia) and finally the successful breaching of the Gothic Line gives the 4 Ind Div a claim in history even beyond its fighting reputation. It represents the culmination of one of the finest warrior forces ever created, the old Indian Army, with its mixture of British and Indian units. Those who fought under the sign of the Red Eagle will always be justly proud of it." All ranks of 21 (RB) Field Company and HQ 4 Div Engrs can be justly proud that they were privileged to serve in such a great formation.

LofC North of Florence and the Gothic Line September 1944 - April 1945

97 Company. remained to the north west of Arezzo until after the River Arno had been crossed and the forward troops had advanced towards the German Gothic Line. On 24th September it moved across the river to maintain Route 67 at Dicomano, on the LofC of 6th British Armoured Div. This was a fairly quiet period and, in succession Lt Dinwoodie went on a Timber Bridging Course, Lt Braye on an Advanced Bailey Course and Lt Browning on a Mines Clearance Course at the Italian SME near Naples.

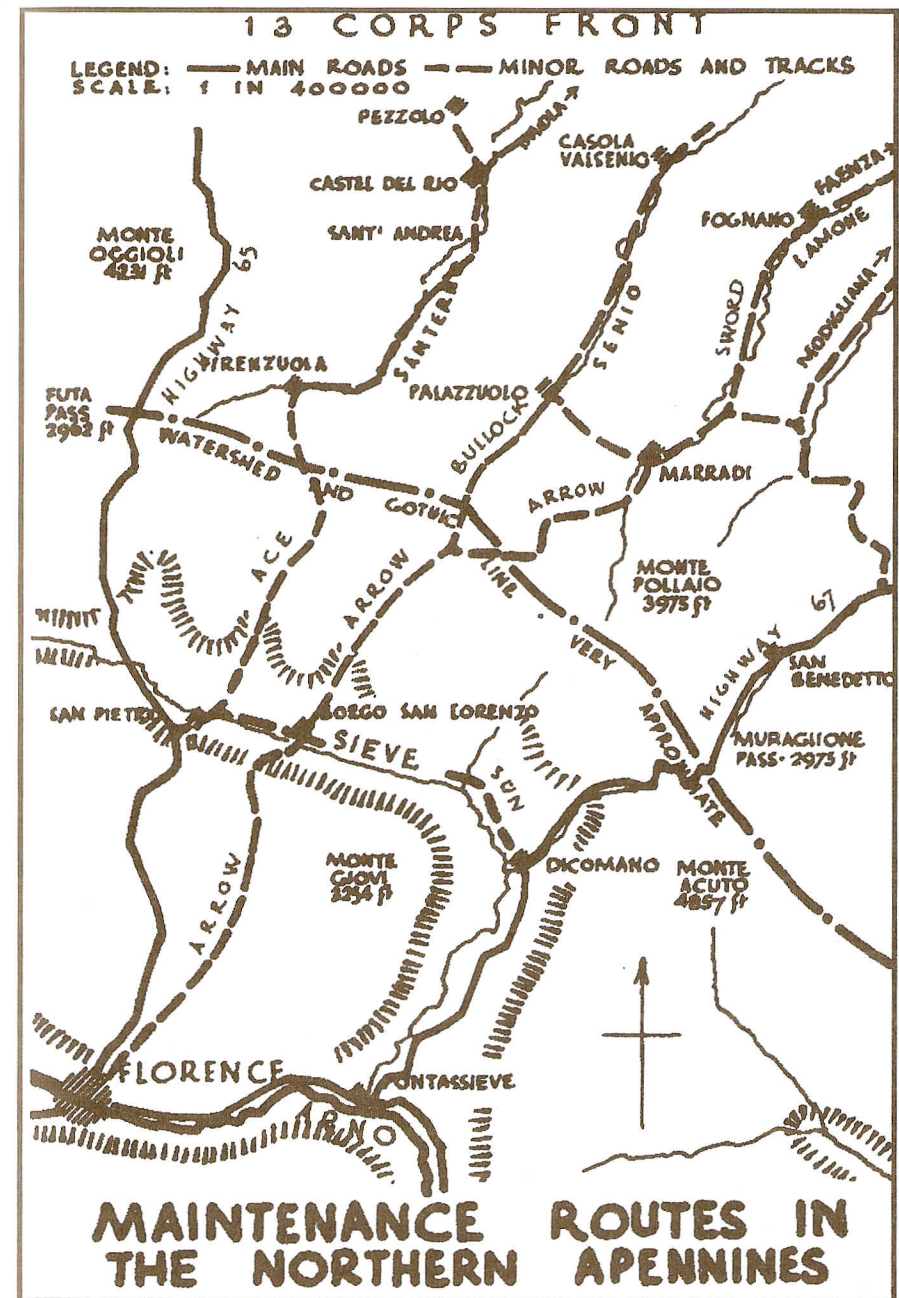
Whilst 97 Company. was at Dicomano, Capt Taj Din, the RBS&M Corps Subedar Major, arrived unexpectedly from India, complete with breeches, field boots, medals and stiffly starched pagri, and stayed for two days. His visit was much appreciated by the jawans and it was a great morale booster.

On 2nd November the Company was moved further east, to the north of Borgo San Lorenzo. No 1 Platoon was based near Company HQ at Palazzuola, 45km NE of Florence, where they worked on “Sword Route” maintaining the road and bridges, with the help of 300 local labourers and 600 partisans. No 2 Platoon worked on “Bullock Route”, some 5 miles to the north as far as Casola, 2 miles south of Casola Valsenio. This road included “Saul” bridge which was 300 feet long with piers of 80 and 45 feet high, the centre span being 180 feet DD Class 12 Bailey. No 3 Platoon worked on “Arrow Route” south of Palazzuola. The Platoons were very isolated, usually seeing someone from Company HQ about once a week. Communication was by wireless. To assist in security each piece of equipment, or location, was given a code name; so that “Patsy has water on the brain” could mean that a bulldozer had blown its cylinder head gasket.

When the Company was in close contact with a forward British Div, a British wireless operator was sometimes attached from the division in order to maintain the HQ/Division wireless net, with the Company's Indian operators maintaining the net to the Platoons. The two British WO/NCOs normally messed with the officers, but when a British OR was seconded they formed their own BOR mess.

On 8th October 301 Company, under Maj J Thornber, moved up to Le Siece, a brick works near Pontassieve (15km south-east of Florence on Route 67). One of their first tasks was to install lighting sets at the Corps Troops HQ. Their bulldozers and auto-patrols were loaned to the field companies to assist in mud clearance and for general road and bridge maintenance.

They then moved to give general support at San Pietro, about 5km to the west of Borgo San Lorenzo. A quarry was maintained, with Italian labourers breaking up the larger lumps left after blasting to about 1 foot in size before loading them into



the tipper trucks. These then took the stones to the various work sites where more Italian labourers would chip them to the size required either for road surfacing or for making culverts etc. This quarry was supplemented at about 1 mile intervals by smaller quarries operated by the platoons of 97 Company. These Italian labourers were supplied with a half-loaf of bread and a cup of hot soup each day as part of their pay. Part of this time 466 Corps Troops Engineers was administered by the American 5th Army and rumour had it that they gave a higher rate of pay to the Italians than the British 8th Army, and that when the Corps Troops returned to the 8th Army the Paymaster requested the CRE to refund the difference.

During the winter of 1944 both 97 Company and 301 Company carried out general road and bridge maintenance to maintain the LofC through the mountains. Most of the road had been constructed on the mountain side, with a sheer drop over one verge. To prevent drivers going over the edge when the road was under snow 15ft high poles, sunk in 3ft of weak concrete were erected at the outer edge of the road at the corners. Dumps of chippings were also placed at strategic parts of the road, marked by a 6-ft pole with the number of the dump attached. Lt Braye says that there were many places where the Germans had not only blown up the many bridges, in the mountains but they had also blown out sections of the roadway leaving up to 100 feet or more of nothing but a steep slope across where the road had been, with the mountain side towering one side and falling away the other. The gap left had to be built up patiently and carefully with timber and filling sufficiently tamped down and reinforced to be able to withstand the transport of the advancing troops and their vehicles. He remembered this both in the Apennines and also later, in northern Italy, on the road up to Villach. Whilst the weather was below freezing point the roads held up fairly well with only routine maintenance, but once the thaw set in they turned into quagmires. It was then a matter of getting the water off the road as quickly as possible, and of keeping catch water and other ditches clear. Special care had to be taken not to set off antipersonnel mines which had been frozen in the ground. Schumines, which could blow off a foot, were made of wood or plastic and were not detectable by mine detectors. "S" mines, which jumped into the air before exploding and scattering shrapnel, also abounded. According to Sandes "Mine-lifting was a daily feature in the life of the men. Every day and along every yard of road, sapper parties picked their way gingerly with detectors and prodders, first clearing the road and then the verges. Wooden Schumines were met in increasing numbers. Electrical detectors were useless and they had to be found by prodding". At one location, where 97 Company had diverted a road through a railway tunnel, 301 Company illuminated the route using their electrical lighting set.

During this period the Units were brought up to strength by reinforcements from India. One of these sappers in 97 Company's Sikh Platoon was dragging a dead donkey out of a snow filled ditch with a D4 bulldozer when he set off an "S" mine which jumped into the air but luckily did not explode. He told his Platoon Commander that a wild animal had jumped out and nearly bit him.

Whilst at Palazzuola HH The Maharaja of Dewar with three Staff Officers, visited 97 Company to see the Maharattas. There was a big tamasha, which was organized by Lt SV Savant IAMC, the Unit MO.

During March 1945 97 Company was relieved and took a 14-day rest, located in the palatial mansion of a vineyard, near Florence. This gave the troops time to see the city and to play volley ball etc. During this period, on 12th March, Maj Eason's return to India, and the Company being taken over by Maj DH Boydell, was the incentive for another tamasha. After their rest in Florence the Unit moved to Scarperia, 3 miles north of Borgo San Lorenzo on "Ace" Route, to maintain the road towards Imola. This route was in constant use by 8 Div vehicles. The Platoon HQs were located in the road posts that had been set up pre-war by the Italians for peacetime road maintenance in winter.

Lt Braye, whilst IC a road post half-way between Palazzuola and Marradi, having been transferred from 97 Company to 301 Company, was working on road maintenance with the unit augmented by about 300 Italian labourers, when he came across a squadron of Canadian tanks returning from the front. One of these had gone over the edge of the road. He investigated and found the tank's crew on a ledge about 30 feet down the hillside, brewing tea! He managed with his D6 bulldozer and its Hyster winch to recover the tank.

Across the River Po Valley - April to May 1945

After the 1944 winter, as the forward troops were now pushing fast through, and beyond, the Gothic Line, 466 Corps Troops were also moved forward. 97 Company and 301 Company, moved to Lugo on the river Senio, near Lake Commechio, north of Faenza and 25 Km west of Ravenna. Here 97 Company built and maintained an FBE bridge and a ferry for 56 British Div. They then followed 8 and 10 Divs north-west to Cento, where they spent two days and nights repairing and welding a bridge across the River Reno.

The war in Italy was by now rapidly drawing to a close. On the 3rd May the Company drove north, across the River Po pontoon bridge that had been built by 13 Corps Engineers, to halt at Badia, 20 miles south west of Padua, where they rested for about a week..

5th May 1945 - VI and VE days and beyond

VI Day (Victory in Italy day) was on 5th May, before VE day, and to help celebrate, the jawans had a quiet day whilst some of 97 and 301 Companies' officers went on a day trip to see Venice.

Two days later orders were received for 466 Corps Troops to proceed down the Adriatic coast Route 16, in a 230 vehicle convoy, via Ravenna to Taranto, staging each night, near Pescara, Vasto and Andria. Their vehicles, which had been in

constant use for many months in difficult conditions, had to be maintained 'en route'. 301 Company's workshop lorry changed a broken road leaf spring on a 3 ton lorry during the first night's stop and changed an entire engine on the next night. The convoy eventually reached Taranto on 12th May where they were to construct a POW Camp at Grottaglie, on Taranto Airfield, for 50,000 prisoners. Whilst here the Company was accommodated under canvas, as were the prisoners. Nissen huts were constructed for the prisoners' ablutions etc and electric substations had to be installed. The whole site was surrounded by barbed wire fencing. 301 Company maintained and operated a central concrete batching plant from which dump trucks supplied the various work sites. 180 troops from 97 Company also acted as escort for 10,000 Prisoners, moving them from No 216 POW Camp.

During the period that the units were building the POW cages those British Officers that had been with their units during the Italian campaign were given Farleave in the UK in order to refresh themselves before being transferred to the Far East for the war against Japan. Whilst on leave they were generally replaced by reinforcement officers fresh from the UK and India. Most of the officers going on leave were given orders that, after their leave, they should proceed from the UK, by air, to rejoin their units in India. Some, however, who were the first to go on leave were instructed to return to Italy.

VJ day and Northern Italy

Immediately after the atom bomb had ended the war in Japan, HQ 466 Corps Troops embarked at Taranto to return to India, whilst those officers still on UK leave followed their orders and also returned to India. The field and field park companies of 466 Corps Troops, however, whilst still at Taranto, received orders to return to northern Italy.

97 Company went to Paradiso, near Udine, where they were employed maintaining the road from the coast at Cervignano to Udine and Isonza. This work also included delaunching and recovering several Bailey Bridges.

301 Company, moved on 6th August to Moggio Udinese, 40km north of Udine on Route 54 to Villach. Here they maintained the road towards the Austrian border and also built a bridge at Ovaro. Whilst here, on 13th September, Spr Mohd Hussain was killed in a lorry accident.

The CRE, during his UK leave, had visited the India Office and was told of the Unit's move to northern Italy, and so made arrangements to join them there. The situation was therefore that the CRE was in Italy with the companies, whilst his HQ and most of the more experienced officers were at Secunderabad in India awaiting the return of the troops. It is reported that the Paymaster tried to say that a CRE without a HQ was not entitled to command pay.

The units' work in northern Italy came to an end on 10th October when both companies were moved back to Taranto by train. On 19th October they embarked on *HMT The Duchess of Bedford* and returned to Poona for disbandment 301 Field Park Company on 4th December 1945 and 97 Field Company on 7th December 1945.

Nominal Roll of those known to have served with RBS&M Units in Italy

HQ 4 Div Engrs (Dec 1943 - Nov 1944)

CRE Lt Col EE Stenhouse
Adjutant Capt DS Orchard
FEIs Maj GVJM Smith (to mid-45); Capt W Cooper (from mid-45)
IOs, LOs, FE2s serving with HQ Engrs at various times
Lts MFJ Barnes; WAT Gerrie; P Howarth; EP Minett; P Mitchell;
A Murray; J Peachy; N Trayler; TC Wolferstan

21 (RB) Field Company (Dec 1943 - Nov 1944)

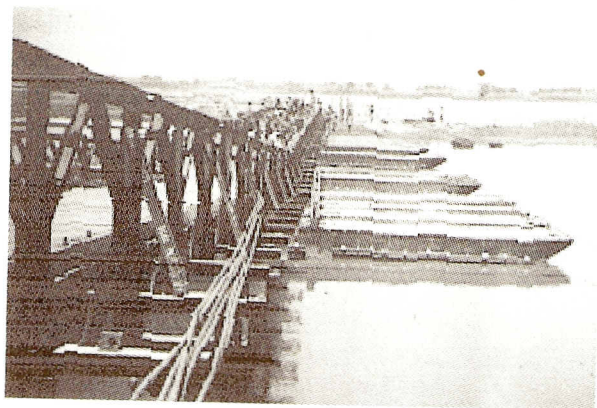
OCs Maj RH Egan IARO (to Apr 44); Maj JRG Finch (from Apr 44)
2ICs Capt F Fraser (to Jan 44); Capt H Colter (from Apr 44)
Lts DL Hughes MC; H Colter (to Jan 44); MFJ Barnes; BJ Cooke ;
EP Minett (to Jan 44); TC Wolferstan; N Traylor (to Jan 44); LM Pant IE
Subedar Mangal Singh
Jemadars Panurang Desmulk; Mohd Riaz MC (from Mar 44)

97 (RB) Field Company (Feb 1944 - Oct 1945)

OCs Maj WF Eason (Feb 44 - Mar 45); Maj DHoydell (from Mar 45)
Maj ADM Dunne (May - Jul 45); Maj WN Croft (Jul 45 - Aug 45)
2ICs Capt ADM Dunne (to May 45); Capt WN Croft (from May 45 - Jul 45);
Capt JP Chalke (from Jul 45)
Lts JD Boardman (from Mar 45); JPW Braye (Jun 44 - Mar 45)
DC Browning (May 44 - Jun 45); GR Bullock (from May 45)
JP Chalke (Jun 44 - May 45); WN Croft (to May 45)
JFD Dinwoodie; FJM German; J Harrison;
SV Ranade IE (wounded May 44); AB Rhodes (to May 44)
MOs Lt SV Savant IAMC (to May 45); Capt C Ray IAMC (from May 45)
Subedar Punderung Mukie
Jemadars Fazal Dad; Pandurung Chowan; Lal Shah; Bachan Singh
BNCOs CSM CJ Oakey; LSgt RW Halbert; Sgt KY Bond (from May 45)

301 (RB) Field Park Company (Sep 1944 - Oct 1945)

OCs	Maj J Thornber (to Jan 45); Maj GE Hallybone (Jan - Jul 45); Capt DLO Lloyd (from Jul 45)
2ICs	Capt WR Malcolm; Capt JFD Dinwoodie (ex 97 Coy Feb - Mar 45); Capt DLO Lloyd (from 14 Mar -Jul 45)
Subalterns	Lt AL Talwar IE (to Oct 45); Lt TA Morris (to Jan 45); Lt JD Boardman (to Mar 45); Lt JPW Braye (Dec 44 - Oct 45); Lt Langley (Jun - Oct 45)
MO	Lt MA Rauf IAMC
Subedar BNCOs Jemadars	Raja Khan CSM S White; Sgt TA Crump; Sgt KH Toms (Jul - Oct 45) Said Abid Hussain; Mohd Fazal



A Bailey Pontoon Bridge

CHAPTER TWELVE GREECE

November 1944 - February 1946

HQ 4 Indian Division Engineers & 21 (RB) Field Company

Compiled by Lieutenant PTC Watson

The background material for the chapter has been taken mainly from *Fourth Indian Division* by Lt Col GR Steven OBE. Dates and names were mainly gleaned from the war diaries of the CRE's HQ and 21 Company but the main engineering and unit details come from the CRE, Lt Col LAB Paten; Article *The 4th Indian Divisional Engineers in Macedonia* published in the RE Journal in March 1946, and from memoirs by Maj MFJ Barnes MBE and Capt TC Wolferstan.

The background

By the Autumn of 1944 the final outcome of the Italian campaign was sufficiently predictable for strategic eyes to turn towards Greece, from which German forces were also withdrawing, leaving behind them a shambles. Not only was the country and its communications ruined by the Italian and German invasions, by the fighting retreat of the Commonwealth expeditionary force in 1941, and by guerilla warfare during the occupation, but the seeds were already sown for the outbreak of a civil war, which has been estimated to have cost eventually more than a hundred thousand lives. To simplify, this was between powerful Communist forces and the legitimate but powerless monarchist government based in Cairo. Britain, whose American and Soviet allies had agreed that Greece was a British sphere of influence, was responsible for clearing up the mess and set about doing so.

Initial Deployment:

British forces began landing in Greece in October, expecting to be hailed as liberators, which they were for a short while, but with more than forty political parties and "Greek hating Greek more than Greek hated German", the warmth did not last very long and they found themselves regarded by many, left and right, as enemies. 4th Ind Div HQ including the CRE's HQ with its 7 Brigade were landed in Northern Greece at Salonika, the second city of Greece. By 11th November, most of the remainder of the division had been lightered ashore at Piraeus, the ruined port of Athens. 21 (RB) Field Company (Maj JRG Finch) was landed at Patras at the opposite end of the Gulf of Corinth from Athens. Their immediate tasks were to repair roads, principally that from Patras to Corinth

on the way to Athens, to guard a power station (3 Platoon, which came under sniper fire and "returned it vigorously"), and to be available to support infantry (1 Platoon) if the internal security situation, already bad, got any worse. 2 Platoon had been further detached to Missolonghi, on the opposite side of the Gulf of Patras, whence it rejoined the company on 9th December without its transport, "burned or unserviceable" under circumstances which the war diary does not reveal. Nearly fifty years later, Finch recalled an early indication of things to come. "I was invited by the local Greek commander (at Patras) to dinner. It was quite a pleasant evening but the theme was how wonderful things had been under the German occupation and how we, the British, must leave them to get on with their own affairs in their own way and not intervene". On 22nd December Maj Finch left to become CRE 4th British Division. He was temporarily succeeded as OC by Capt EP Minett. On 31st the company enjoyed one of those occasions so welcome to soldiers far from home and families; they gave a party for two hundred local children. The following day there was a ceremonial parade for Lt LD Hughes to receive his MC, won in Italy. Shortly after these two happy events there followed a sombre one; the company's only King's commissioned Indian officer, Lt LM Pant, was killed by a Teller mine while instructing the Greek National Guard.

Meanwhile, over Christmas, so important was the settlement of the Greek problem to the British Government, that Churchill (Prime Minister), Eden (Foreign Secretary), Macmillan (resident minister in the area), Field Marshal Alexander (Supreme Commander Mediterranean theatre), Greek party leaders and the Head of the Orthodox Church, Archbishop Damaskinos (subsequently appointed Regent), had been meeting by the light of hurricane lamps in a cold and hungry Athens, to reach one. With grim realism Churchill had told the GOC (Lt Gen Sir Ronald Scobie) not to hesitate to act as if Athens were a conquered city where a local rebellion was in progress. Thus was a truce agreed, though there was a good deal of heavy fighting before it could be enforced.

Two more British Divisions arrived by the third week of January 1945, giving greater freedom of movement to 4 Ind Div, now commanded by Maj-Gen CH Boucher DSO. The situation in Salonika, as in Athens, began to ease and the division crossed the truce line, with agreement, into ELAS-controlled Macedonia on 2nd March, tasked with maintaining order, collecting illicit arms and above all restoring communications which, of course, was where the sappers came in. Ironical that the place from which Alexander the Great had set out to conquer India, nearly 2300 years before, should depend for its recovery on troops from India, under the supreme command of another Alexander.

Initial Engineering Tasks

21 Company reached Salonika by sea from Patras on 26th February but with only half its transport and tools. HQ 4 Ind Div Engrs (CRE Lt Col LAB Paten) was already well established in the city. The HQ was an RB staff unit and

two of its field engineers, Lts MFJ Barnes and TC Wolferston had been with 21 Company in Italy, during some of the worst of the fighting, so the company was amongst friends. Its "parish" extended from Veroia, east to the Axios River, neighbouring 12 (Madras) Field Company, and west to where it met 4 (Bengal) Field Company on a line between Florina and Kozani. Its first brief was to make good communications on the Axios-Salonika-Athens road, south towards Katerini across the Ariakmon river, via a class 9 ferry at Yidha, which is about half-way between Veroia and Salonika. Other works during this very busy month of March included upgrading the Axios-Veroia road to all-weather class 18 and this involved building DD Baileys over the Loudias (160ft) and Lower Periferiaku (130ft). The latter is regarded as being of particular interest since a level road was achieved by running it across the second storey of the DD; otherwise the first storey would have had to be jacked up and packed to achieve the same end. In addition, the repair of six smaller bridges was begun, two at a time, on the Veroia-Kozani road, of which a stretch of 5km was described by the CRE as "almost impassable" to bring it up to all-weather Class 18. Early in the month (6th) Maj HJ Colter took over command from Minett, who reverted to 21C. CRE paid two visits (12th & 30th). Company HQ was established at Veroia on 19th for the remainder of its stay in Greece, and Major HS Williams replaced Colter who was off on 61 days leave to South Africa. Williams' appointment dated from 1st April, as did the introduction of civilian labour (200 men) to take over routine maintenance of the Salonika, Veroia, Kozani road.

Bridging in Salonika area in April and May 1945

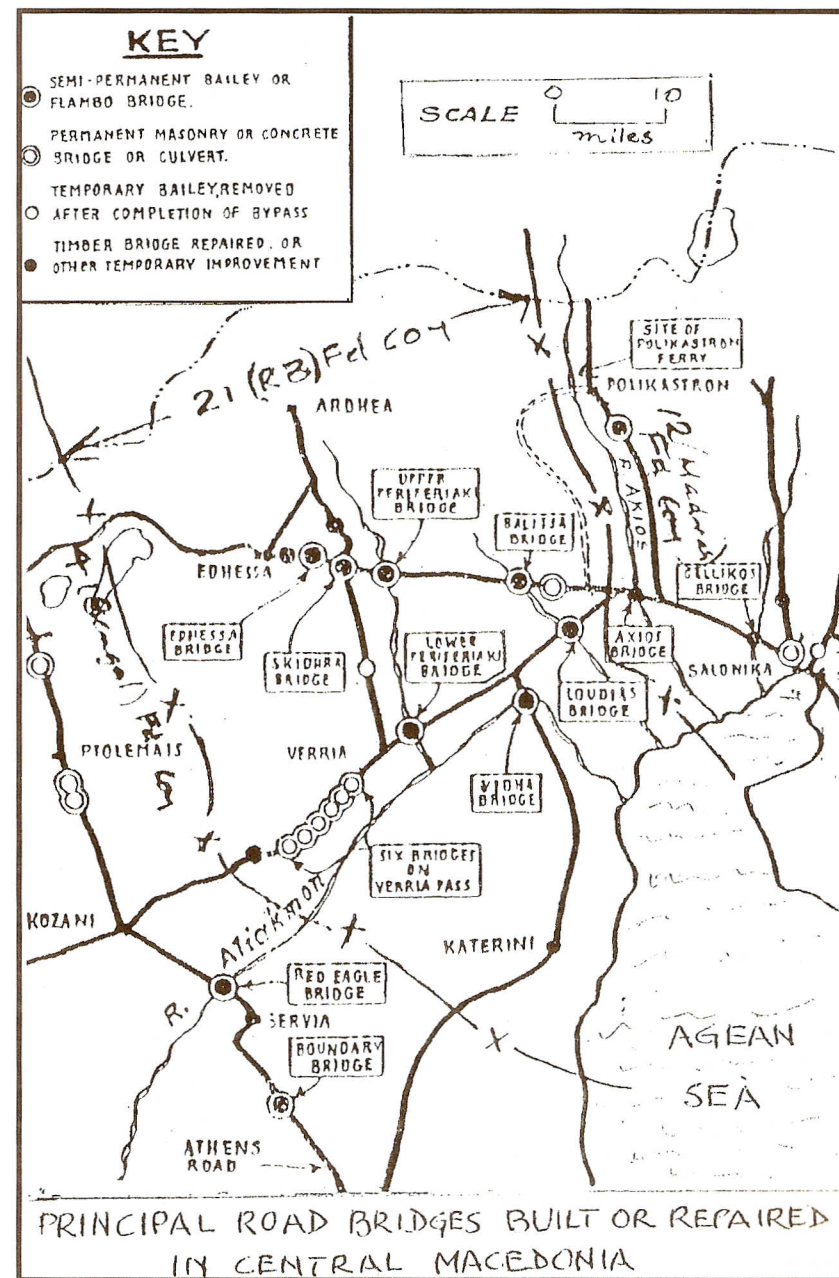
April faced 21 Company with probably its biggest challenge in Greece, at Yidha, where it had earlier established the Class 9 Ferry across the Aliakmon, three hundred feet wide at this point, and by now proving wholly inadequate for military traffic and relief supplies to reach Katerini, on the main road to Athens. The original bridge at Yidha, downstream from Veroia, had consisted of five steel lattice girder spans supported on four piers, but demolition had been thorough, though not quite thorough enough. From the right, or near, bank, number one span to number one pier was sound; number two span, apparently sound, depended precariously at its far end on number two pier, badly damaged; third and fourth spans and number three pier were missing; number four pier and the fifth span to the far shore were sound. There was not enough Bailey to cover the gap of 180 feet between sound piers, numbers one and four.

The solution the CRE and his field engineers decided upon was ingenious. The first step was to lighten the number 2 span by removing its concrete decking and any other extraneous material, leaving a clean steel skeleton and lifting its far end high enough to repair the damaged number two pier. This was done by constructing a double double Bailey cantilever, rolling it out to the far end of the sagging first span, tying the two together with strops, loading the tail of the Bailey with everything - sandbags, Bailey spares and what have you - until the original skeleton span was lifted gently at its far end above the horizontal. There

it hung while the cracked and unstable part of the pier was removed. Barnes recalls that this had to be done with a succession of small explosive charges so as not to rock the suspended span and ruin the whole operation. When it was judged that what remained was sound, it was shuttered (by the divisional field park company) and concrete poured to a depth of twelve feet, restoring the pier to its original height, and allowed to set. That done, the counter-weight on the tail of the cantilever was gently unloaded and the far end of the original span allowed to subside to where its designers had intended. While concrete decking was placed over the restored span, the cantilever was dismantled and carried across the river by the class 9 ferry, where the components were used to construct 120ft triple single Bailey to insert it in the gap between piers two and four. More concrete decking, fixtures and fittings and general tidying up were completed and the new Class 18 Yidha bridge was completed on April 30th, just twenty-eight days after the start of the operation, in time for the ceremonial opening in the presence of the Governor-General of Central Macedonia, the Divisional Commander and "many Greek and British Senior Officers". 1 and 3 Platoons, who had built it, provided the guard of honour and then rested, for how long is not recorded. HQ 4 Ind Div Engrs war diary notes: "Clear air, hot sun, looks like the beginning of summer". Much later, on return to Britain for a course, Barnes found himself part of an admiring audience before which the whole unusual procedure was explained by somebody else. Photographs of the bridge are included in the article in the Autumn 1945 RE Journal: *The 4th Indian Divisional Engineers in Macedonia* by the CRE, Lt Col LAB Paten, and original drawings are attached as Appendix "A" to the war diary, dated 19th May 1945.

Bridging tasks from May 1945

The month found the company completing the small bridge repairs on the Veroia pass, and major works to help bring the Salonika-Edhessa-Florina road up to Class 18. The major works were the Upper Periferiaki and Balitsis bridges. They were complex operations and the best way of describing them is to quote verbatim from Paten's article: "The Periferiaki is a large land reclamation canal, and, at the time of our arrival, was bridged by a temporary Class 9 timber bridge situated beside the wreckage of an unfinished concrete bridge. The work to be done consisted in making good the embankment approach to both abutments, the demolition of one damaged concrete span which was lying up-ended against the sixth pier, the demolition of piers two, five and six which were cracked and leaning, and the rebuilding of these, plus pier number seven, in reinforced concrete. Finally the placement of 330 feet of Flambo (modified Bailey, using mild steel) over the eight spans; the Flambo to be concrete-decked to complete the bridge. By the time the public works contractor was ready to take over the work on 20th July, we had completed both abutment fillings, demolished all three damaged piers and rebuilt pier number 2. In accordance with instructions from HQ we then withdrew sapper labour, less that required for operation of transport and machines which we continued to supply in support of the contractor.



"At Balitsis the situation was slightly different: the old concrete bridge had been effectively wrecked and a temporary Class 9 timber trestle structure, two hundred feet long, had been superimposed on the wreckage. Here, therefore, it was necessary to provide a bypass for traffic to enable the old bridge to be cleared and rebuilt. By 20th July the by-pass, a temporary Bailey, had been opened, the old concrete bridge was about 70% cleared and the centre of three necessary piers was ready for excavation and rebuilding. At this stage we handed over this work also to the PWD contractor, continuing to give support with transport and plant. It was planned the pier work should be finished by October when the sappers would return and place a Flambo bridge to span them."

The CRE's article concludes with a tribute to his sappers. "They had to work short of Bailey equipment and machinery; bridges and camp sites were cluttered with German mines; winter weather was bitter; and there was a constant risk to health from malaria, which meant that they had sometimes to camp twenty miles from their work where the malaria-carrying mosquitoes were rife. Lastly, they had been trained and were used almost continuously in an operational role. They were therefore unfamiliar with and untrained for the building of permanent and semi-permanent bridges which formed such a large part of their work in Macedonia. The Sapper and Miner units (4, 12 and 21 Field Companies and 11 Field Park Company) could", wrote Lt Col Paten, "be justly proud of their bridging achievements. They built and repaired no less than 44 bridges of which five were timber ones, 24 were Baileys or Bailey type (mild steel, Flambo) and fifteen were concrete and masonry. The total length of bridge construction was 4278ft." As will be seen from the map 21 Company in the central area of Macedonia, was responsible for at least one third of these constructions.

Other sapper tasks

The company now had to become used to peacetime procedures for accounting, employment of civilian labour (often, it seems, asking for more pay), and a fair amount of boring routine. But their big moments, one of which was on June was 1st, with a visit from CinC India, General (later Field Marshal) Sir Claude Auchinlech. As officers and men went on leave, there were changes in personnel. In July Maj Colter resumed as OC and Williams went on leave.

By September thoughts were turning towards the oncoming Balkan winter and the construction of cold weather quarters (Nissen hut in the first instance) for other people as usual. "We build them nice barracks. They say they are bad, and that our colonels are methodist, married or mad." Brigade HQ huts were first as is proper. In October there was more winter accommodation, warm battle dress in the evenings and a visit from CinC Land Forces (Greece) Lt Gen Sir Ronald Scobie KBE, CB, MC (late RE). By the end of the month, 43 Nissens had been built. In November there was clearing slush and snow from Veroia pass, the necessary equipment having been prudently ordered back in July. Italy and 1939-45 Stars were distributed. In December news was received that 4 Ind Div would return to

India early in 1946. Having been the first Indian troops into the Mediterranean theatre, they would be the last out. There was PT in the mornings to warm up the jawans before work, and accommodation works were handed over to Garrison Engineer, Veroia.

By January 1946 they were getting ready to go home. Stores were packed and unsafe explosives destroyed. Wolferstan recalls that the company had a number of captured German weapons, which they had intended to keep as souvenirs, until higher authority directed that unauthorised weapons taken back to UK would involve those concerned in being sent on another tour of duty. They were therefore dumped in the deepest waters of the Aliakmon, to no effect since Balkan people then, as now, considered that every man had the right to bear arms, and promptly fished them out again for future employment. There followed heavy snow and heavy work to clear the Veroia Pass, and there was a farewell visit from the new Divisional Commander, Maj Gen TW Rees, whose next unhappy job it was to command the Punjab Boundary Force during the partition of India. In February, Colter, Wolferstan and Bell returned to UK and Minnett became OC before the company embarked for India. Together with HQ 4th Ind Div Engrs they left Greece on 2nd February, reaching Kirkee on 16th. Leave was delayed to assist in quelling the Royal Indian Navy Mutiny. Capt Barnes and Lt Rogers were attached to 21 Field Company from HQ Div Engrs. With the sad duty in Bombay completed, the whole company went on two months leave from 28th February 1946.

Nominal roll of those known to have served in HQ 4 Ind Div Engrs and 21 (RB) Field Company in Greece from November 1944 to February 1946.

HQ 4 Ind Div Engrs

CRE	Lt Col IEE Stenhouse (to 21st Jan 1945) Lt Col LAB Paten (from 21st Jan 1945)
Adjutants	Capt D Orchard (to early 1945). Capt MFJ Barnes (from Spring 1945)
Field Engineers	Capt WH Cooper, Lts DS Orchard, MFJ Barnes, TC Wolferstan, HL Rogers

21 (RB) Field Company

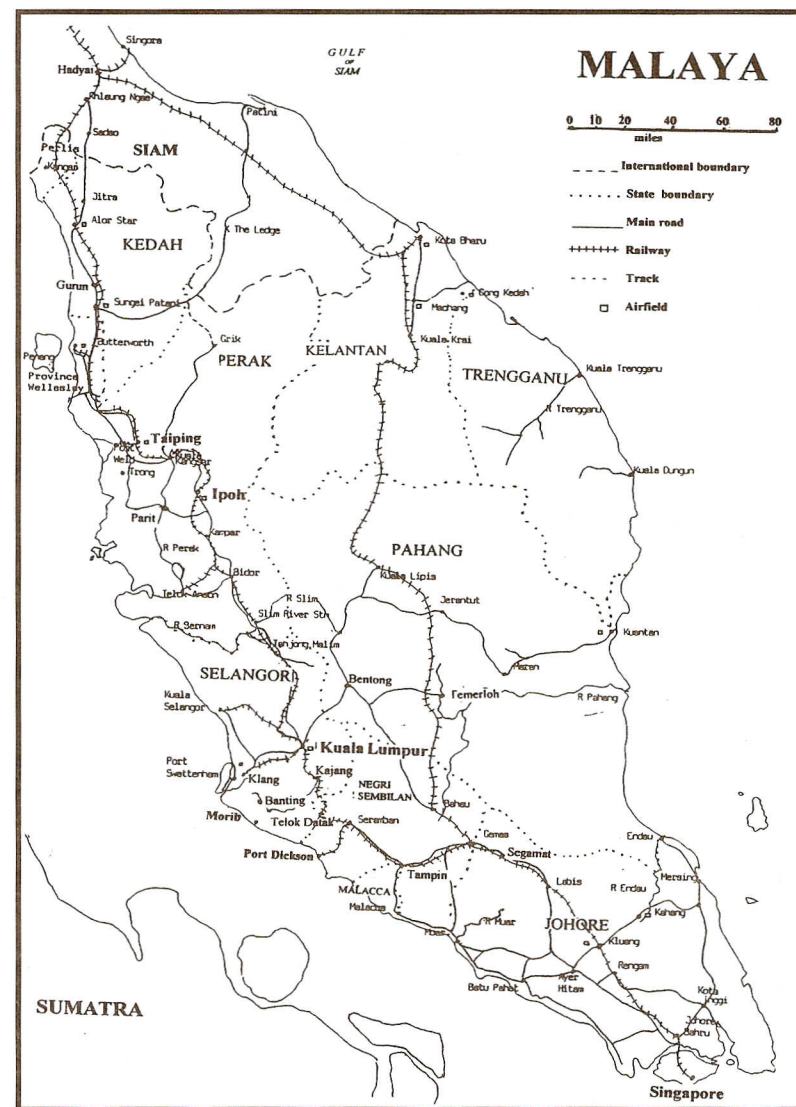
OCs	Maj JRG Finch (to 22nd Dec 1944) Maj HJ Colter (Mar/Apr 1945 and 24 Aug to Jan 1946) Maj HS Williams (1st Apr to 24th Aug 1945) Capt Minnett acting OC during gaps and for return to India
2 IC	Capt EP Minnett throughout time in Greece.
Section Officers	Lts LD Hughes MC, Cooke, Erlam-Taylor, Weddle, Bell, Trayler, Galligan, O'Brien, LM Pant IE (killed in mine explosion).

PART III **MALAYA** **NOVEMBER 1940 TO FEBRUARY 1942**

HQ 9 Indian Division Engineers
 19 (RB) Field Company
 22 (RB) Field Company
 42 (RB) Field Park Company

HQ 11 Indian Division Engineers
 17 (RB) Field Company
 23 (RB) Field Company

45 (RB) Army Troops



CHAPTER 13

LOSS OF SINGAPORE

Compiled by Lieutenant Colonel WL Sheldon

“The worst disaster and largest capitulation in British military history”
(The words of Winston Churchill on the fall of Singapore)

The Royal Bombay Sappers and Miners also suffered the greatest disaster in their long record of distinguished service. They had lost two-thirds of their peacetime regular units in Malaya and Singapore when it was surrendered on 15th February 1942.

The war diaries of the RBS&M units involved in this campaign, with three exceptions, all ended before the fighting began. The exceptions are 42 Field Park Company which ended on 31 December, 45 Army Troops Company which ended on 20 December and, most notably, that of 17 Field Company which continued in great detail until the end of January 1942. Much reliance for relevant details has therefore been placed on *The Indian Engineers 1939-47* by Lt Col EWC Sandes DSO MC RE and *Sappers in the Malayan Campaign 8 December 1941 to 15 February 1942* by Lt Col RB Muir RE.

The memoirs and memories of the following who took part in the campaign have proved invaluable:

Brigadier N S Bhagat
Major F J Pipe

Captain DH Andreae
Mr B Hewitt

Strategic Background

To set the stage briefly, the series of events which led to the ultimate fall of Singapore in 1942, began in 1921 when the British Government decided to build a Naval Base on the island. Its purpose was to enable the British to preserve stability in South East Asia and counter any possible threat in that area generally including against Australia, New Zealand and even Burma and India. The base was to be impregnable, that is to say it was to be heavily fortified to the south, the seaward side, since this was perceived as the only direction from which an attack could possibly come. To the north, facing Malaya across the Johore Strait a kilometre away, there were to be no defences. The idea that Singapore was an impregnable fortress was therefore a myth from the beginning and, in

spite of the fact that over the years some threat from the north was recognised, little was done to neutralise this threat, an omission which was to have fatal consequences. In 1921 with aircraft in their infancy, it was not foreseen that the time would come when both military and naval forces would be desperately vulnerable to this new form of warfare. Although she had been our ally in the 1914-18 conflict, Japan with her over-weening ambition and burgeoning population, was beginning to be seen as a potential destabilising influence in the Far East. Her nearest land base however was Formosa, more than 1500 miles away from Singapore, an impossible distance from which to launch an amphibious attack. Moreover, the technical capabilities of the Japanese and their fighting qualities were not rated highly. In view of her war-like history this last is difficult to understand. Anyway, with the Royal Navy as a shield operating from an “impregnable” base, the threat from Japan was perceived as minimal. Our ally France was firmly in control of IndoChina and Thailand was no threat at all. Gradually over the years the remote possibility of a landing on the south-east beaches of Malaya in the Mersing area was recognised. It was decided to deal with this possibility mainly by the use of aircraft which had by now become more sophisticated. As a result two airfields were built in Johore State to augment those on Singapore Island. The fall of France in May 1940 and the decision of the Vichy Government to allow the free access of Japanese forces into Indo-China in September of that year, altered the picture dramatically.

The Japanese in strength were now much closer. Even though Japan was still nominally neutral the threat of amphibious landings in Southern Thailand, or even on the north-east coast of Malaya, and supported by land or carrier-based aircraft, became very real. The force levels in Malaya and Singapore began to be augmented, but Britain, preoccupied with making good her losses at Dunkirk, the air battles over the UK and Europe, the battles in the Atlantic and North Africa, did not place Malaya very high on the list of priorities. Some additional defence works had however been under construction since 1939 and those were now increased. Also the construction of further airfields was commenced but only after the Army had insisted that these were to be fully manned by the RAF and protected by ground troops. This last had unfortunate consequences as Army dispositions were then not ideally suited to combat large scale ground attacks from the north. The airfields on the east coast were completed in 1941 just in time for use by the Japanese invaders. Until 1939 it had been the policy that in the event of conflict in the area the British fleet could be expected to arrive from the UK within 70 days. As the situation in Europe became more critical this period was extended to 180 days. This in turn altered the concept of the defence of the Naval Base and it was seen that, in the event of invasion, it might prove necessary to defend Malaya for several months. Thus, late in 1940, 11 Ind Div with two Brigades landed in Singapore followed by the first contingents of 8 Australian Div in February 1941. By the end of November 1941 there were, in addition to garrison troops in Singapore and Penang, three under-strength divisions in Malaya. They were short of anti-tank and anti-aircraft guns and their weapons generally were unsuited to jungle warfare in

which they had little or no experience. Indeed they were, for the most part, untried in any form of warfare and **they had no tanks**. They were soon to encounter battle-hardened soldiers highly trained in amphibious and jungle warfare and equipped with tanks, a force moreover supported by an air force which had highly sophisticated aircraft against which the mostly antiquated Buffaloes of the RAF were no match and they were quickly swept from the skies. On 2 December 1941 the battleship *Prince of Wales* and the battle-cruiser *Repulse* with an escort of four destroyers arrived in Singapore. On 10 December, without air cover, both capital ships were sunk off the east coast of Malaya by carrier-borne aircraft. Thereafter the seas round Malaya as well as the skies above were also controlled by the Japanese. Although everything possible had been done, with the resources available, since the increased threat was perceived in 1940, time proved too short to put a country the size of England and Wales into a satisfactory state of defence. It was thus an unequal contest from the start. However, be that as it may, the defenders were not without guts, they learned quickly the art of war, there were many heroically fought battles throughout the campaign and there were deeds of individual bravery, not least by the sappers, the bulk of whom were from the Royal Bombay Group. The end came just 70 days after the Japanese invasion began on 8 December 1941. Of the approximately 130,000 Indian, Australian and British troops involved, including Base and LofC units, some 9,000 were killed, a very few escaped and the remainder became prisoners. Within these numbers was the British 18 Div of which more later. For their part the Japanese, in spite of the British scorched-earth efforts throughout the campaign, gained vast quantities of raw materials and large stocks of equipment as well as enormous prestige throughout SE Asia.

Topography and Communications

Geographically Malaya, some 450 miles long north to south and 160 miles wide at its widest point, hangs like a pear from the southern end of Thailand's Isthmus of Kra. At its southern extremity the small island of Singapore, 28 miles east to west and 14 miles north to south, is attached to the mainland by a 1200 yard long causeway across the Johore Strait. A spine of mountains runs down the northern two-thirds of the country making east-west overland communications extremely difficult. On the west the coastal plain terminates mostly in mangrove swamps but there are a few sandy beaches suitable for amphibious landings and useful rivers give access inland. The east coast consists mostly of sandy beaches. At the time of the campaign dense tropical jungle covered most of the country interspersed with rubber, tea, palm and tobacco plantations and tin mines as well as the agricultural fields of the indigenous population. Before the war Malaya produced 38% of the world's rubber and 60% of her tin, figures that were boosted on the outbreak of war in Europe. On the western side of the Malacca Straits the Netherlands East Indies island of Sumatra had large reserves of oil, much sought after by Japan.

A metre gauge railway from Singapore crossed the causeway into Johore then divided at Gemas some 130 miles to the north. The main line connected

the principal towns on the west, then entered Thailand north of Alor Star. The eastern branch, running roughly up the centre of the country, reached the coast at Kota Bharu in the north-east. It then crossed into Thailand rejoining the western line near Singora some 120 miles further on. A good tarmac road with a 20 foot carriageway roughly shadowed the railway to the west. On the east coast roads scarcely existed and those which did were poor and crossed rivers by means of ferries. These poor communications were the result of a deliberate pre-war policy to make movement difficult for any east coast invader. A west-east road ran from Kuala Lumpur, the capital, to Kuantan on the east coast and another transverse road linked Batu Pahat with Mersing about 60 miles north of Singapore. Apart from tarmac roads in the various estates, the remaining roads were little more than tracks linking the various villages.

3 Indian Corps Arrive

Pre-war the population of Malaya was some 5.3 million consisting of 42.5% Malays, 41.5% Chinese and 14% Indian. The remaining 2% was made up of Aborigines, Eurasians, Europeans and others. Of the others some 8,000 were Japanese, mostly traders, fishermen and photographers, occupations ideal for espionage activities. In Singapore the population of about 700,000 was about three-quarters Chinese.

The six RBS&M units and both 9 and 11 Div Engrs arrived in Malaya between late 1940 and early 1941. They were integral to formations as follows:

9 Indian Division:	HQ Divisional Engineers 19 (RB) Field Company (8th Brigade) 22 (RB) Field Company (22nd Brigade) 42 (RB) Field Park Company
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11 Indian Division:	HQ Divisional Engineers 17 (RB) Field Company (28th Brigade) 23 (RB) Field Company (15th Brigade)
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45 (RB) Army Troops Company was later attached to 9 Div

The two Indian divisions, together with the Singapore and Penang Garrisons and the Malay States and Straits Settlements Volunteers, comprised the 3rd Indian Corps. The Chief Engineer of 3rd Corps was Brig KBS Crawford an ex-Bombay Sapper and Miner. This unfortunate officer, having been a POW for 2½ years in the first World War, was destined to suffer a worse fate in a similar capacity for a further 3½ years in the second.

From their arrival in Malaya until the Japanese invasion all RB units were engaged on a variety of engineer tasks including amongst others, water supply, pillbox construction, beach defences, recce of demolition targets and preparations

for bridge demolitions. They were also involved in road construction, gun emplacements and identification of engineer resources. 42 Field Park Company workshops manufactured many thousands of pickets and produced prefabricated wooden girders for bridges.

In the time-honoured belief that attack is the best form of defence, a plan was made for a force from 11 Div to advance into Thailand and occupy the port of Singora which was seen as a likely Japanese landing area. Code-named MATADOR the plan was to be put into operation as opportunity offered. Sapper officers in disguise carried out reconnaissances in Thailand to this end. However, sensitive to the integrity of Thai territory prior to the invasion, but then overtaken by events, the plan was never implemented. At the same time work was in hand to prepare a defence line at Jitra just north of Alor Star about 10 miles south of the Thai border. Started late and short of resources the line, was never properly completed. On the east coast in the Kota Bharu area 9th Divisional Engineers were hard at work on beach defences. 19 Field Company built additional pillboxes and unsuccessful efforts were also made to produce anti boat obstacles from bamboo in the absence of tubular scaffolding. Any hope of defeating an amphibious assault over the 26 miles of beaches for which 8th Brigade was responsible depended on the use of mobile columns. These in turn required roads of which there were virtually none south of Kota Bharu. However, the road-building machinery and transport needed for this purpose was not available as it was scattered throughout Malaya building aerodromes. The only land communication with Kota Bharu was via the railway from Kuala Lipis 160 miles to the south. At Kuantan, half-way back to Singapore, where the west-east road terminated on the east coast, 22nd Brigade and 22 Company faced similar problems but with the added difficulty that the river mouth at Kuantan had not been bridged. The means of crossing was still by ferry which created the inevitable bottle neck. The decision was taken to improvise a floating bridge using boats towed up from Singapore. But many of these did not survive the voyage and of those that did many needed repair. Thus, in spite of every effort, 22 Company was unable to complete the Kuantan bridge in the time available.

Campaign in Malaya

This then was the gloomy situation which pertained when, on the night of 7/8 December, the storm broke and Japanese landings took place, unopposed at Singora and Patina in Thailand and against stiff resistance at Kota Bharu. Although Operation MATADOR was no longer a possibility nevertheless 11 Div organised several small raids into Thailand to delay the Japanese advance. A road column which included two platoons from 17 Field Company, reached Sadao on 8 December and the sappers successfully destroyed two bridges before the column was forced to withdraw. Another raid set out from Kroh, an inland village on the Thai border. This was one of the original start points for MATADOR. The column, known as Krohcol, included elements of 45 Army Troops Company. Its task was to delay the enemy's advance by seizing and

holding a feature called The Ledge. This was a position about 22 miles inside Thailand where the road Kroh-Patani ran for some miles along the steep side of a jungle-clad slope. On crossing the border the column was held up by Thai resistance and did not reach the beginning of The Ledge until early on 10 December. Two miles further on the first Japanese troops, supported by tanks, were encountered. Very severe fighting took place and after Krohcol had suffered heavy casualties it was forced to withdraw to a position west of Kroh but not before the sappers had destroyed six bridges. Only one demolition failed and that was because the guncotton primers had become sodden through exposure to several hours of heavy rain. Thereafter all primers and detonators were protected by condoms, a practice quickly followed by other units, and it was not long before chemist shops throughout Malaya ran short of this commodity. The sappers were fortunate whilst preparing one demolition in that the crew of a tank overlooking the site, was unable to depress its gun sufficiently and shells and bullets flew overhead. Although Krohcol broke off contact on 12 December the Japanese follow-up was swift and it was here that Japanese troops equipped with bicycles were first encountered. This mobility advantage was thereafter met repeatedly throughout the remainder of the campaign.

In the Kota Bahru area 9 Ind Div was hard pressed. The enemy was supported by land-based aircraft from airfields in southern Thailand and the airfield at Kota Bahru was soon also in Japanese hands. On 16 December a general exodus from Kelantan State was ordered and thus, in both the east and west of Malaya the relentless withdrawal, which would come to its bitter end in Singapore just two months later, had begun. The extensive pre-war Japanese training in amphibious and jungle warfare, their armour and sea and air superiority, gave them advantages which were now to become all too shockingly apparent. Also the Japanese were masters of infiltration. Helped by the lightest of uniforms and sometimes wearing Malay sarongs they were often indistinguishable from the local population. They were also able to live easily off the country. A bottle of water and a ball of rice would serve them well for days in the jungle in which their many light automatic weapons were ideal. Their tactic of moving soldiers down the coast by night in towed captured boats enabled them to land behind the British lines, there to lie up or move inland to attack in the flank or rear thus enabling them to use to the maximum the element of surprise.

The withdrawal from Kelantan State took six days during which 19 and 22 Field Companies and a detachment from 42 Field Park Company under 2Lt D Andreae carried out many demolitions of culverts, tunnels and bridges including that of the longest railway bridge in Malaya. 2Lt Andreae, who then aged 19 was probably the youngest sapper officer in Malaya, takes up the story of his detachment: "Within a couple of days of the invasion, I was sent with a detachment of Punjabi Muslims to Kota Bharu with instructions to blow up railway bridges as and when ordered. I left half my men under a havildar at the first bridge with instructions to prepare it for demolition and the other half at a second bridge under a jemadar. When I returned to the first bridge I realised

that my sappers did not have the slightest idea how to use explosives and I had to do it all again with them providing the labour; you can imagine my fears about the second bridge which unfortunately were born out. However, they learned very quickly and before the end they were explosive experts. We blew up four large railway bridges and were fortunate that all demolitions were in the end successful as much of our gun cotton was dated 1910! On the third bridge the gun cotton on one girder just caught fire instead of exploding due to too high a moisture content. Luckily the Japanese were slow in arriving as it took us nearly a day to dry the gun cotton slabs before being able to complete the demolition. On several nights we went north of the bridge we were about to blow in order to lift rails to deter the Japanese from relaying them and for use by us further south. I had the use of half a platoon of Mahrattas from 19 Company to help with this back-breaking task". It is worth noting that Field Park Company sappers are mostly skilled tradesmen not normally called upon to carry out field company tasks. Before the invasion they were mainly employed on making large wooden girder bridges which, Andreae recalls, were immediately destroyed by them after the invasion! 42 Company went on to destroy a total of thirteen bridges and two tunnels.

In the west the incomplete Jitra line started to give way. On 11 December, on the Alor Star – Changlun road, an important road bridge, under enemy attack, was due for demolition. An attempt by 23 Field Company to do this failed and the OC, Maj J E Bate, was killed. A second attempt also ended in failure. 17 Field Company was then ordered to carry out the task. A demolition party, accompanied by the OC, Maj NS Bhagat, spent five hours close to the bridge waiting to do this. However, by now the bridge was under shell fire from our own guns and although Maj Bhagat requested the shelling to be suspended for a while to enable the charges to be positioned, this was not possible as the enemy were already poised to take the bridge. Maj Bhagat and his men then had to return to the company area on foot as their vehicle was riddled with bullet holes.

At 1500 on 12 December enemy pressure was building up rapidly and 17 Company was ordered into a weak part of the Jitra line to act as infantry. Unfinished sapper tasks were dropped and two platoons were sent immediately. At about 2000 fire was exchanged with the enemy. Infantry on the left of the 17 Company position also opened fire and managed to wound three sappers in the process. This was looked upon with some disfavour, but it is well known that these things do sometimes happen in war. At about 0100 on the following morning the enemy began infiltrating the flanks of the company position and an officer was sent back to liaise with the unit to the rear. It was then discovered that the order to withdraw had already been issued but, because at that time sapper units had no wireless, the order had not been received.

The company withdrawal was not without its hazards. It necessitated a cross country trek through paddy fields and crossing the Sungei Bata River by means of a boat attached to a rope. On arrival at the company location in Gurun late on 13 December it was found that a further two sappers had been wounded and a

VCO and 39 other ranks were missing during the previous day's action. The use of sappers as infantry prevented the complete demolition of the road and rail bridges in Alor Star. The rail bridge fell almost intact into enemy hands when the demolition was only partially successful. A last minute attempt by 2Lt FJ Pipe, now in 23 Field Company, to complete the destruction, was to run an armoured train across the bridge in the hope that, in its weakened state, it might collapse. Accordingly the train was set in motion and the driver jumped clear. However to everyone's dismay the train crossed safely and continued driverless until it ran out of steam some fifty miles to the south.

By 13/14 December 11 Div had evacuated the Jitra line and exhausted troops were holding unprepared positions round Gurun, a large area of paddy fields and rubber plantations criss-crossed by many small roads. The main task of the divisional engineers was to delay the enemy advance as much as possible by demolitions, mines and scorched earth generally. The work was often hindered by determined air attack. By the time of their arrival in the Gurun area the sapper units had become so depleted that 45 Army Troops Company was incorporated into 11 Div as a field company. From 31 December to 5 January however it was necessary to transfer this unit to 9 Div to assist 22 Brigade on the east coast. Within 24 hours of 11 Div taking up positions round Gurun the Japanese had breached the defences and the withdrawal continued. The sappers were once more engrossed in their exciting yet, at the same time, disheartening tasks of destruction. Strangely it was found by 17 Company that wooden bridges were particularly difficult to destroy. Even when the main beams were cut they seemed to hang together leaving adequate crossing places for infantry.

At Butterworth, opposite Penang, 17 Company's tasks were to destroy cranes, petrol tanks, boats and stores round the docks and at the same time crater the aerodrome runway and wreck any planes. As it turned out some of the last appeared to be intact which was particularly galling in view of the constant air attacks by the Japanese. In a few hours work was accomplished which could normally have been expected to take days. Inevitably, in the Butterworth/Penang area, not every boat and barge could be totally destroyed and the Japanese were to make good use of those they could salvage to ferry troops down the coast. The speed in demolition work achieved by 17 Company was due to good training allied to the practice of splitting platoons into three detachments each commanded by a VCO or experienced senior NCO. These were then able to operate independently, map reading to find their targets, completing their tasks and then returning to base.

After Butterworth 17 Company's next tasks were in the area of Taiping. Here their most important demolition was the 250 yard long Banjar pontoon bridge over the Perak River at a place called Parit. It had the normal configuration of a pontoon bridge with a ramp at each end and a floating section in the middle. It was decided by the OC, Maj Bhagat, that the best way to deal with this bridge in order to create the longest obstacle was to blow the ramps then cut the cables

of the floating section allowing this to swing with the current into the home bank and there to destroy each pontoon individually. The preparations were considerably hampered by enemy air attacks. The bridge was hit in several places. RSJs were damaged and the demolition cables were cut. As soon as it was possible to do so the sappers repaired the damage and waited to blow. There was some confusion as to who would be last over and when, a situation not unusual in a retreat. Eventually a Gurkha battalion accompanied by armoured cars began crossing at 2030. There was some doubt about the latter as the bridge was only designed for loads of up to 3 tons and the armoured cars weighed twice that. However, the bridge designers had built in an overload safety factor and the armoured cars crossed without mishap. The plan to destroy the bridge was then put in hand. The pontoons duly swung round in the current and grounded some 25 yards off shore where they were finally destroyed. In spite of the constant air attack during this operation the company suffered no casualties. Their vehicles and equipment however were badly damaged to an extent that the unit was not fully operational until those had been made good.

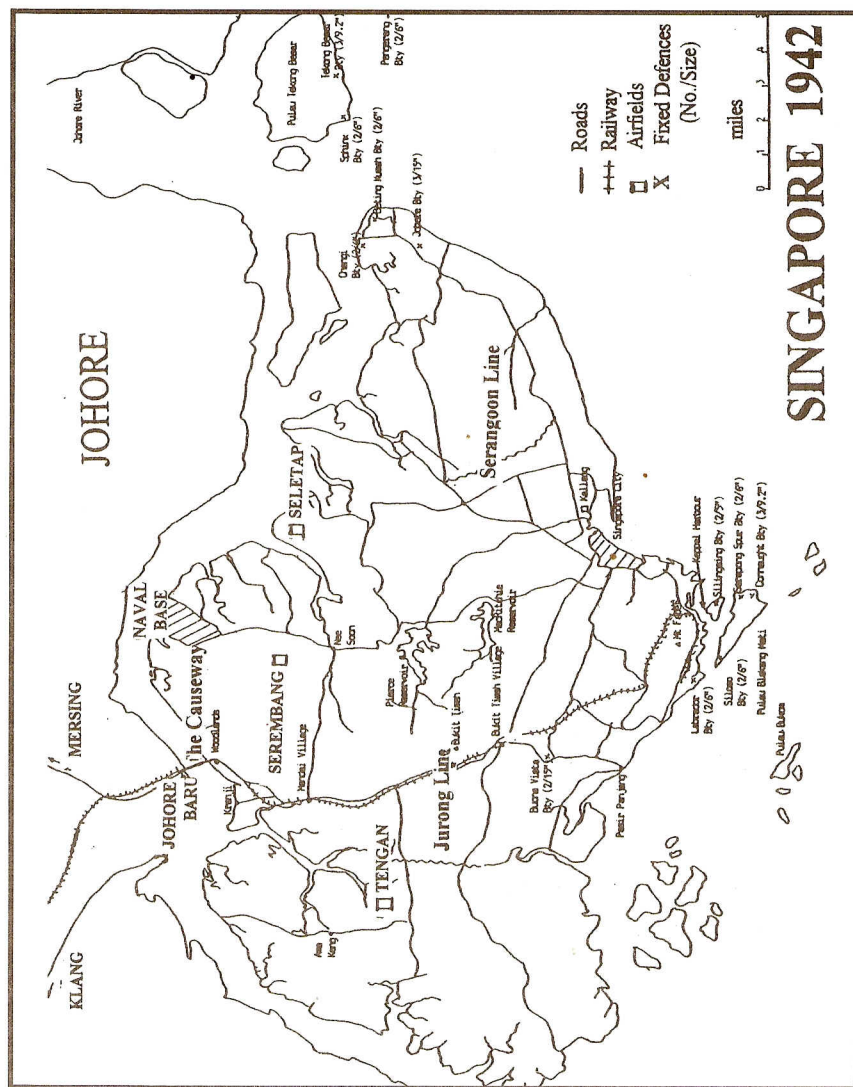
The company, their task completed, withdrew on foot to Batu Gajah some miles to the south. During the remainder of the day small bodies of men, who had become dispersed during the night in the chaos at the bridge, made their way back to the company location. Maj Bhagat rightly placed great store on the well being, morale and discipline of his men. Parades and drill were carried out whenever there was a lull in operations. No opportunity was lost to draw rations or to replace clothing and equipment. Above all, by entrusting small parties to carry out independent tasks, a sense of responsibilities and self confidence was instilled which in turn boosted morale under very trying conditions.

In spite of the best efforts of the sappers, in the confusion of rapid withdrawal, not all demolitions were successful for a variety of reasons. One of these was the "order, counter-order, disorder" syndrome. Such an episode took place on the Dipang bridge at Kampar on the main road south from Ipoh. 23 Field Company was originally responsible for the demolition and fixed the charges. Then, for reasons now unknown, the order to remove them was given and the company moved on to other tasks. At the last moment, as retreating troops were pouring over the bridge, a party from 23 Company was called back to refix the charges and prepare to blow. With very little time to do this the first attempt failed, again due in part to wet primers for, alas, there was a shortage of condoms. A further attempt, under enemy attack, was partially successful but in the end it was not a good obstacle. It should be noted here that at the start of the campaign 23 Company was short of officers as the 2IC Capt Faruqi was in India on leave. When the OC, Maj Bate, was killed on 11 December Lt DN Wilson became acting OC and the acting 2IC was Lt R L Swaine. It was then that 2Lt FJ Pipe was posted in from 17 Company to boost the number of officers. Wilson and Swaine were later promoted to major and captain respectively.

By 26 December the situation was also fast deteriorating in the east and 22 Brigade had been pushed back into Pahang State. The floating bridge, which 22 Field Company had been building at Kuantan to facilitate withdrawal, could not be completed. A boom across the mouth of the river, which was also operated by the company, needed to be opened and closed frequently to facilitate the passage of ships. When fighting started in the Kuantan area it became necessary near midnight to open the boom to allow a coastal steamer to escape. Prior to this the oil and petrol stocks from tanks which had been blown up had spread across the water. The tidal range was about 20 feet and at this time the couplings joining the two halves of the boom were some 8 feet below the surface. This necessitated sappers diving beneath the oily surface to release them with the ever present fear that the surface might catch fire. This unpleasant task was eventually completed and the ship escaped. Pill boxes had been built along the tidal reaches of the river and these had to be two stories high to allow for the changes in water levels. Large areas had been mined and many demolitions prepared. A main task was the destruction of the existing ferry when the last troops, the long distance patrols from 22 Brigade in contact with Japanese advancing from Khota Bahru along the coast, were out. This caused some excitement when, on its last journey and somewhat overloaded, the ferry grounded. Fortunately it was possible to rock it free and it was destroyed on New Years Eve 1942. Whilst these activities were in progress a platoon of 22 Company under Lt JR Hannington had been ordered, in an infantry role, to defend the airfield. They were over-run whilst still firing at the enemy. Casualties were severe and 17 men including Hannington and an Indian officer were lost.

On the night 3/4 January 22 Brigade was forced to start withdrawing westwards towards Jerantat. It was there that 45 Army Troops Company, lately switched from 11 Div, had built a ferry across the Pahang River. 22 Brigade reached and crossed on this ferry in the early hours of 7 January. During their withdrawal from Kuantan the enemy had been greatly hampered by the delaying activities of 22 Company. After Jerantat 22 Company continued in the withdrawal by stages to Singapore, demolishing every bridge encountered en route. In all nearly 100 demolitions were carried out by this unit during January alone.

On the west coast the Japanese were exploiting their freedom of the seas by using boats and towed barges captured at Penang to make landings near Telok Anson on 1 January and Kuala Selangor on 3 January. Just prior to this 17 Company had carried out a scorched earth operation in the Telok Anson area in which, in addition to bridge demolitions and road cratering, several rubber factories with their stocks of rubber were also destroyed. Moving then to Kluang, just south of Kuala Lumpur, the company was given the task of delaying the movement of any amphibious troops inland from the coast towards Kuala Lumpur. To achieve this the unit carried out a large number of demolitions in the Klang-Banting-Kajang area. On 7 January the bloody battle of Slim River, where tanks were used in force by the enemy, practically saw the end of 11 Div as a fighting force. The Japanese then pushed on rapidly through Kuala Lumpur to



the northern border of Johore State. Between the 8 and 14 January 17 Company withdrew in stages to Kluang in central Johore demolishing bridges and creating obstacles en route. On 11 January alone 25 major demolitions were fired most of which were bridges exceeding 120 feet in length. After carrying out many more destructive works along the Ayer Hitam -Kahang road and in the Kluang-Rengam area the company moved on to Singapore Island on 25 January 1942.

At about this time 53 British Brigade, newly arrived in Singapore and part of 18 British Div, the remainder of which was still at sea, was rushed to the front. 45 Army Troops Company was placed in support of this Brigade. In the ensuing battles 53 Brigade was severely mauled and suffered many casualties as did 45 Company. One of its platoons under the command of 2Lt Pillai had to find its way back for four days through dense jungle to rejoin the company.

By early 31 January all surviving units of the British forces had crossed into Singapore and the causeway was cut behind them. The sapper units with 11 and 9 Divs including 42 Field Park and 45 Army Troops Company had destroyed many hundreds of bridges and culverts, created many obstacles, denied huge stocks of stores and raw materials to the enemy and laid many mines in the long withdrawal from the Thai border. There was still more to come on Singapore Island before the end.

Singapore - The Last Days

The remainder of 18 British Div, which had left the UK eleven weeks earlier before the war with Japan had started, arrived in Singapore on the 29 January, too late to influence the outcome. The division had originally been destined for the Middle East and was equipped for that theatre. Diverted to Singapore en route its loss in Singapore mere days after its arrival made the final end that much the more bitter. The total Indian, British and Australian forces on the Island numbered about 85,000 but many were Line of Communication and Base Troops employed on administrative duties far removed from jungle warfare. Even at this late stage defences against attack from Malaya were singularly lacking. The extraordinary thought behind this appears to have been that if large scale defence works were started on the north side of Singapore Island, while troops were still fighting in the northern half of Malaya, this might have been bad for morale. The idea was certainly novel, particularly so as it was also considered vital to defend Singapore for as long as possible in the protection of the other areas of South East Asia including the Netherlands East Indies and also Australia and New Zealand.

On arrival in Singapore 23 Field Company was given the task of destroying as much as possible of the naval dockyard facilities located on the north of the Island about 4 miles east of the causeway. There being nothing left for the dockyard to do it had been evacuated some two weeks before 23 Company arrived leaving much of it intact. This was too good an opportunity to miss and, despite

the fact that they were frequently under enemy shellfire, the men quickly made themselves comfortable for the first time since the campaign began. One of the unit's primary targets was the King George VI Graving Dock with its enormous 250 ton crane capable of lifting a gun turret off a capital ship. The buildings nearby were capable of refitting a naval fleet consisting of every type of vessel. Maj FJ Pipe tells the story: "The Graving Dock needed, above all, the huge pumping capacity to empty itself. The enormous centrifugal pumps were not all that difficult to deal with. Large charges of gelignite were placed on the bearings of each. The explosion produced a scene of utter chaos, especially as the whole installation was below ground. Delighted with the success of that part of the operation, we then turned our attention to the 250 ton crane. This consisted of a gigantic carriage on four legs supported on wheels running on a track the length of the dock. This carried the gantry which swivelled through 240 degrees. It was decided to place cutting charges on two of the four legs. Those chosen were the two closest to the dock. Again we were very satisfied with the mess we had created, the crane keeled over and came to rest in the bottom of the dock".

Anchored or moored to buoys in the Strait were a number of craft which got in the way of the fields of fire of troops dug in along the shore. 2Lt Pipe was ordered to get rid of them. Taking a motor boat, a small detachment and plenty of explosives he went out by night and after a few hours all but two large iron barges had been satisfactorily disposed of. The barges contained five-gallon tins of fuel. A large charge was suspended between the barges and the resulting explosion set both alight. Thinking they would soon sink and the fuel burn itself out the demolition party withdrew to a well earned rest. However, this did not happen and the barges drifted ashore setting fire to many small boats in a yacht basin and also the Naval Officers' Yacht Club. Finally a 7500 ton merchant ship was tackled by 2Lt Pipe. A charge was placed inside the hull well below the waterline. There was an explosion and smoke billowed but that was all. It was only after engaging the services of, as he put it, "a naval-looking person", that the seacocks were discovered and targeted and the ship went down.

On 8 February Japanese shelling and bombing increased in intensity and during that night the Japanese crossed the Johore Strait in great force to attack the north west of Singapore Island. The area was held by troops of the Australian Div who fought bravely and took very heavy casualties but no less than 13,000 of the enemy landed that night and a further 10,000 the following day. On the night 9/10 February a further landing took place just to the west of the causeway and the Japanese sappers managed to bridge the gap in the causeway. Medium Tanks then crossed to reinforce the forces already landed. Meanwhile 23 Company had been given an infantry role and had dug in at a cross roads some 4 miles to the south of the Naval Base. Again John Pipe remembers: "23 Field Company waited. The fighting moved closer to our position and the troops who had been in action ahead of us now broke off contact and withdrew through our position. They had a lot of casualties and told us the enemy were advancing in large numbers. We waited for an assault but it didn't come. The next day without

coming under attack we were ordered to a new location much further back. As we began to move we came under mortar fire and took whatever cover was available. When this stopped I looked around my platoon and was amazed and relieved to find no one had been hit".

Elsewhere a composite RE Battalion was formed which included three Sapper and Miner Companies. One of these was 45 Army Troops Company. On 13 February the battalion was moved to a position on the outskirts of Singapore City. Desperate fighting began on the 14th and at 1400 on the 15th the battalion position came under violent attack sustaining many casualties. 45 Company alone sustained 40 casualties. The surrender took place just six hours later.

After the surrender a very few of the thousands on the island managed to escape in small boats to Sumatra. One of these was 2Lt FJ Pipe. Here they were received and helped by the Dutch whose own agony was about to begin. They crossed the island by river boat, truck and train to Padang on the west coast where, in the adjacent port of Emmahaven, an Australian cruiser, HMAS *Hobart*, took them aboard and ferried them to Ceylon to fight another day. The remainder went into cruel captivity where many died of starvation, disease and ill-treatment before the war ended. Yet one more escape however showed extraordinary determination and courage. 2Lt Pillai of 45 Company, a Tamil from Southern India, escaped from his POW camp outside Singapore City and, suitably disguised, mingled with the local population. He then made his way to Penang where, claiming to be a merchant, he obtained a passport from the Japanese Consul in the Thai port of Renong, a visa for Burma. He then made his way slowly to Rangoon and, unable to get to Akyab in the Arakan, he worked his passage as a cook on a river boat up the Irrawaddy. On reaching northern Burma he took to the jungle. After a three week hazardous journey on his own he reached British forces near Fort White in northern Assam. On his return to Kirkee he was awarded a well earned MC for his remarkable exploit.

The names listed below have been taken from War Diaries and the memories of those present at the time. Included are all who were in the various units at any time in Malaya whether or not they were actually present during the campaign.

9th Indian Division Engineer Headquarters

Lt Col TH Lindsay
Capt CA Hamilton
Capt AF Smith
2Lt Carter-Clout
2Lt StG Tyler

11th Indian Division Engineer Headquarters

Lt Col JDF Steedman
Capt HW Scudamore
Lt DS Leghorn
2Lt P Ibbotson
2Lt JE Ralph

17 Field Company

Maj NS Bhagat IE; Maj P Cator
Capt Faruqi IE; Capt NM Porter
Lt Glenister; 2Lt Dawson; 2Lt Marshall
2Lt FJ Pipe (to 23 Company late Dec 41)

19 Field Company

Maj M Delme-Radcliffe; Maj ARS Lucas
2Lt Butters*; 2Lt Pritchard

22 Field Company

Maj AT Heard
Capt IW Pugh; Capt LMH Wadia IE; Capt Street*
Lt Hannington*; Lt Pritchard; Lt A Whaley
2Lt JR Hammond
Jem Surat Singh

23 Field Company

Maj JE Bate; Maj PA Easton; Maj DH Wilson
Capt TAC Brownlie; Capt RL Swaine
2Lt RR Howell; 2Lt FJ Pipe (from 17 Company)

42 Field Park Company

Capt TW Nash*
Lt SN Das IE *
2Lt Grant*; 2Lt D Andreae
Jem Mohd Malik
CSM T Plews

45 Army Troops Company

Maj R Dinwiddie
Capt JD Edgar*
Lt TD Hyamson
2Lt Pillai MC IE
Sub Sohan Singh
Jem Gurdial Singh

* Mentioned in despatches whilst in Malaya.

PART IV

BURMA

- CHAPTER 14 RETREAT**
- CHAPTER 15 BUILD-UP IN ASSAM**
- CHAPTER 16 PIPELINES**
- CHAPTER 17 IN ARAKAN**
- CHAPTER 18 DEFENCE OF IMPHAL**
- CHAPTER 19 ADVANCE TO MEIKTILA AND
 MANDALAY**
- CHAPTER 20 RECOVERY AND RECONSTRUCTION
 OF LOWER BURMA**

In the Autumn of 1941 India seemed to be a very safe base. General Wavell had secured Abyssinia, Eritrea, Syria, Iraq, and Persia and was about to start his second Cyrenaican campaign (Chapter 8). To the east, Malaya and Singapore had been greatly reinforced from India, Australia and Great Britain. Burma also seemed to be reasonably secure. The only threat was from the north if the Chinese Chungking government, supported and assisted by the USA and India, fell to the Japanese who had occupied north and central China. The likelihood of war coming to the borders of India seemed no more likely than the periodic skirmishes on the North-West Frontier. India, in its methodical way, was slowly building up its army to serve abroad (Chapter 1). Four divisions were already in the Middle East and two had been sent to Malaya and Singapore, leaving not one fully trained division in India.

The relative detachment of India from the fighting operational theatres came to an abrupt end early in 1942. Not only was Singapore lost, but General Wavell, increasingly threatened by German occupation of Crete and the Dodecanese and by German advances towards the Caucasus, was unable to reinforce his forces in Cyrenaica. There the Axis powers had built up their forces sufficiently to drive the Eighth Army back almost to the Egyptian frontier (Chapter 8). The Japanese capture of Malaya and Singapore (Chapter 13) not only initiated their attack on Burma but, by its incursion into the Bay of Bengal, directly threatened the east coast of southern India. The outbreak of serious communal disturbances there demanded the active presence of the army; not least engineer units, due to the threat to communications (Chapters 1 & 2). Sir Winston Churchill, when asked what he considered the most dangerous moment of WW2, replied that it was the intercept of a Japanese signal that they were poised to do a "Pearl Harbour" on Trincomalee. It gave the British fleet time to take avoiding action by going west to an atoll refuge. The Japanese, later in 1942, did sink an aircraft carrier and its escorts off Ceylon.

The defence of Burma had been a low priority. Little had been done to reinforce the small Burma army and put it, and the country, on a war footing. Communications between India and Burma were almost entirely by sea except in the north which depended mainly on the Brahmaputra with its seasonal problems. The few railways and roads on India's north-east frontier were built only to serve the Assam plantations and the north Burma oilfields. The topography, terrain, soils and climate greatly hampered the engineer services and, further forward, the sappers in Arakan and in Manipur, in their work of developing communications to support the fighting formations later deployed there. All the Part IV chapters highlight these problems.

Burma had not been organised to face a massive invasion. The higher command and control of the meagre defence forces there in early 1942 had not been properly considered and the structure became chaotic. In September 1939 Burmese forces came directly under the British Chiefs of Staff in London, but their administration remained the responsibility of the Burmese government. In

November 1940, operational responsibility was transferred to the newly formed Far East Command in Singapore, again administrative responsibility was shared between the Burmese government and the War Office in London. To quote Field Marshall Sir William Slim: "To separate operational from administrative responsibility is to break a rule that I have never seen violated without someone paying a heavy penalty." On 12th December 1941, after the Japanese had started their attack on Malaya, and one day before they started their invasion of Burma, operational control was passed back to India until 30 December, when it was passed to the recently formed American, British, Dutch, Australian (ABDA) command, located in Java, but with administrative responsibility remaining with India. With the rapid demise of ABDA (on 27 February), operational control reverted back to India. Thus in sixteen vital months, Burma came under five different higher headquarters, with administrative responsibilities virtually separated for nearly the whole time. A major consequence of this lack of operational control by India did not lead to any improvement in land communication between the two countries, so when the Japanese invasion started there was still no road or railway linking them, except between Assam and the north Burma oilfields.

The fortunes of the RBS&M were at their lowest ebb in their then 125 year history. Four of their seven pre-war regular companies and two more which had been raised in 1940, had been lost in the fall of Singapore (Chapter 13). With the other three pre-war regular companies deployed in the Middle East, together with three more raised in 1940, only two RB companies were available to help the small Burmese army. Both were inexperienced with little more than a year's service. It is greatly to the credit of the Group Centre at Kirkee under Colonel HP Cavendish DSO OBE that in spite of having lost so many pre-war regular NCOs which would have been so helpful in training recruits, no less than 25 field company size units and several independent platoon-sized ones were raised to fight successfully in Burma; also all six of the eastern front pipeline units. During this period the six companies in the Middle East and Mediterranean also had to be supplied with reinforcements as well as sending a seventh company there (see Order of Battle). One company only in each of the S&M groups served in both the Middle East and Burma. 20 (RB) Field Company earned this distinction for the RBS&M.

The chapters in this part follow much the same sequence as that used by Lt Col EWC Sandes DSO, MC in his *Indian Engineers 1939-47*. Two chapters overlap in time, some of the others - Chapter 16 Pipelines is really a part of Chapter 15 Build-up in Assam, but continues to the end of the war; and Chapter 17 In Arakan starts in 1942 at the same time as Chapter 15 but continues to May 1945. It should be appreciated that the Arakan campaign, under 15 Corps, was, in effect, a separate front to that of 4 and 30 Corps in Manipur State and later in central Burma. They were not dependent on each other's LofC or tactical deployment.

Each of the seven chapters forming the Burma campaigns has a different author and styles vary considerably. All the writers studied all the RB unit war diaries concerning their chapter and in some cases other HQ and units too. Much time was needed to research them which could only be done at the Public Record Office at fixed and limited times. Memoirs and articles were also provided by members of the Association. The names of these contributors are shown after the chapter list of units and the compiler's name. Maj AN Fradgely, the author of Chapter 19 also helped greatly with co-ordination of several other chapters.

Bibliography. All the compilers referred to some other histories mainly for background information. The following list comprehensively covers all sources used by the seven chapter writers of Part IV:

<i>Defeat into Victory</i>	Field Marshall Sir William Slim KG DSO MC	
<i>The Indian Engineers 1939-1947</i>	Lt Col EWC Sandes DSO MC	
<i>Before the dawn</i>	Brig Sir John Smyth Bt	
<i>The war against Japan Vol II</i>	HMSO 1958	
<i>The Most Dangerous Moment</i>	Michael Tomlinson	
<i>The Longest Retreat</i>	Tim Carew	
<i>Tank Tracks to Rangoon</i>	Bryan Perrett	
<i>Burma: The Longest War</i>	Louis Allen	
<i>Burma: The Turning Point</i>	Maj Gen IH Lyall Grant MC	
<i>The Retreat from Burma</i>	Maj Gen James Lunt	
<i>Dawns like Thunder</i>	Alfred Draper	
<i>The underrated Enemy</i>	Adrian Stewart	
<i>Beyond the Chindwin</i>	Bernard Ferguson	
<i>China Dragons</i>	John Hill MC	
<i>The Road past Mandalay</i>	Published by Michael Joseph	
<i>Little Men</i>	KW Cooper	
<i>Report to the Combined Chiefs by SACSEA 1943-45</i>	Admiral Lord Mountbatten	
<i>Official History of the Indian Armed Forces in WWII 1939-45 Volume I</i>	SN Prasad, KD Bhargava and PN Khera	
<i>Ball of Fire (5 Div)</i>	Antony Brett-James	
<i>The Fighting Cock (23 Div)</i>	Lt Col AJF Doulton OBE	
Short histories published by War Department of the Government of India:		
<i>The Black Cat Division (17 Div)</i>	<i>The Dagger Division (19 Div)</i>	
<i>The Fighting Cock (23 Div)</i>	<i>A Happy Family (20 Div)</i>	
Royal Engineer Journal Articles	Author	I s s u e
<i>Disaster at the Sitang Bridge</i>	Maj ERB Hudson TD	Apr 82
<i>When I became an Engine Driver</i>	Maj ERB Hudson TD	Dec 77
<i>Engineer operations with the 14th Army</i>	Brig HF Horsfield CBE MC	Sep 45
<i>Assam Lines of Communication</i>	Brig R Gardiner CBE	Jun 48
<i>The Tamu-Kalewa Road</i>	Brig POM Wakeham OBE	Sep 46
<i>Reminiscences of Days with RBS&M</i>	Brig JRG Finch OBE	Aug 94
<i>I'll give you a Riding Mule</i>	Maj WL Sheldon	Jun 64
<i>Jeep Railway in Burma</i>	Lt Col PA Easton	Dec 46
<i>Improvisations in North Burma</i>	Lt Col PA Easton	Sep 48
<i>Crossing the Irawaddy 4 Corps Feb 1945</i>	Col A Murray	May 47
<i>The role of Air Transport in the Burma Campaign 1941-1945</i>	Capt KD Nelson	Apr 98
<i>The Sittang Rail Ferry</i>	Col SK Gilbert and	
	Capt G Holliday	Jun 48
<i>The Myitnge Project</i>	Lt Col JJD Groves MC	Sep 54

CHAPTER FOURTEEN

RETREAT DECEMBER 1941 to MAY 1942

24 (RB) Field Company and Malerkotla Field Company

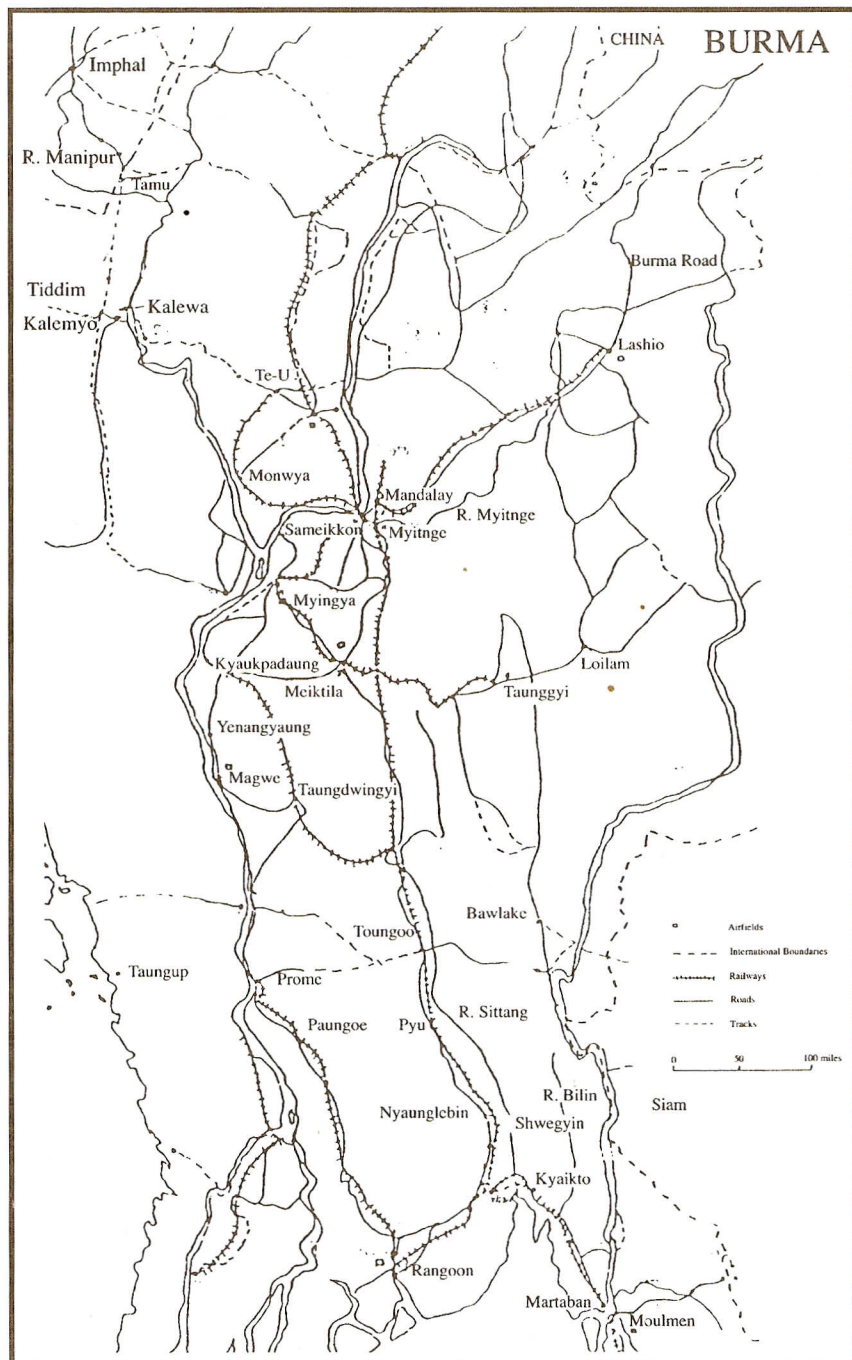
Compiled by Lieutenant Colonel HP Munro TD

All the background sources for this chapter are included in the list with the introduction to Part IV, *Defeat into Victory* and *The Indian Engineers 1939-47* in particular. Some dates, names and details have been taken from the unit war diaries. That for 24 (RB) Field Company is missing up to 31 March 1942. Thereafter it is in detail. The Malerkotla Field Company diary was destroyed during the retreat but it was rewritten from memory in narrative style when the company had withdrawn to MS109 on the Imphal-Dimapur road. The compiler is particularly indebted to Maj ERD Hudson TD (a lieutenant in the Malerkotla Company) for his two RE Journal articles of December 1977 and April 1982, and his comments; also those of Maj Gen IH Lyall-Grant MC who was OC 70 (Bengal) Field Company during the retreat.

Introduction

The first signs of a future war appeared in 1940, when, due to political pressure from the Japanese, the Burma Road was closed for a few months. In July 1940 the Japanese occupied northern Indo China and the remainder later that year. By March 1941 their influence extended over Siam. This allowed them to build up their forces before invading Malaya and Burma.

At the outbreak of the war, there were two British battalions (2nd Battalion King's Own Yorkshire Light Infantry and 1st Battalion Gloucestershire Regiment) in Burma together with three battalions of the Burma Rifles (an infantry regiment of the Indian Army) and thirteen battalions of the Burma Military Police. The last named patrolled the borders of the country. An expansion of Burif was started and nine battalions were formed. In April 1941 13 Indian Infantry Brigade arrived and was posted to the Southern Shan States. In July 1 Burma Division was formed with its HQ at Maymyo, with its two brigades stationed at Toungoo (1 Brigade - 2 KOYLI and 1 & 5 Burif) and the other (2 Brigade - 2, 4, 6, 7 & 8 Burif) at Moulmein with its battalions spread over Tenasserim. In November 1941 16 Indian Infantry Brigade accompanied by the Malerkotla Field Company arrived at Rangoon. The brigade was moved to the Mandalay area with the Malerkotlas to Taunggyi, the capital of the Southern Shan States. On arrival the company was employed on various engineering tasks, in support of a brigade water supply and road improvements etc. However 3 Section had the unpleasant job of winking gelignite out of timber piles of bridges and "Saps" dug under roads.



This was done on the orders of the command of 13 Ind Inf Brigade, which was very significant when related to the subsequent lack of prepared charges on the Sittang Rail bridge. Subsequently the brigade moved by rail, arriving at Kyaikto on 29 January 1942 to come under command CRE 17 Div. 17 Indian Infantry Division, newly raised and with little training had arrived during January and February 1942, and was deployed to meet the Japanese advance in Tenasserim.

Tenasserim is that part of Burma lying south of Moulmein and stretches some 500 miles down to Victoria Point. At its widest point it is less than 100 miles, with very few roads or tracks. Its defence importance was that several airfields had been constructed as part of a chain of airfields so as to reinforce Singapore by air. Strategically it was virtually indefensible with what forces were then available.

The Company was deployed with 16 Brigade as far as Kyaikto, coming under command of CRE 17 Div. It prepared and blew up several bridges in the area, covering 17 Div's withdrawal from Martaban back to the Bilin River positions, as well as providing water points. It then was moved back to the west (ie home) bank of the Sittang Bridge on 21 February, having completed the final bridge demolition at Kyaikto. The move from Kyaikto to the Sittang River was horrific. The road was only an earthen track, the company was under sporadic air attack, including one by the RAF, and it was very hot and dusty. It took ten hours to move some ten miles.

Other engineer units involved in the reinforcements were:

- 50 (Madras) Field Park Company and 60 (Madras) Field Company arrived at Rangoon at the end of December;
- 18 AW Company IE landed at Rangoon on 31 January;
- 24 (Bombay) and 56 (Madras) Field Companies arrived on 6 February;
- 70 (Bengal) Field Company landed on 3 March; in addition
- 1 Burma AW Company was already with 1 Burdiv.

Withdrawal in Tenasserim

In accordance with Gen Hutton's orders, 17 Div had fought the Japanese forces to a standstill on the Bilin River line, but equally had exhausted themselves. This led to a very slow withdrawal to the Sittang Bridge, which doomed the division, as another fresh Japanese force was making for the bridge with a wide flanking move.

There is evidence that the bridge had been previously prepared for demolition, as had the road demolitions in the Taunggyi area, but, likewise, all the charges had later been removed and buried nearby. Luckily the boxes to hold the charges had been left on the bridge on three of the spans - 3, 4 & 5 from the far (east)

bank. Suddenly at 1600 on 21 February the company was ordered to prepare the bridge for a hasty demolition.

The bridge consisted of eleven 150ft through-girder type spans. Due to the time available, the company could only prepare the three spans which had the boxes for the charges already fixed to them. Lt BA Khan took number five span, Lt ERB Hudson number four, and Lt W Mills (FE HQRE 17 Div) and 2Lt A Macklin (1 Burma AW Company) number three. The task was finished by 1500 on 22 February. During its preparation, although the bridge was too far for aimed rifle fire, two sappers had been wounded by long range "Overs". There was an extreme shortage of electric cable, so number five span was to be fired electrically, whilst numbers three and four had to have safety fuse initiation. Additionally the electrical firing point had to be located between the bottom flanges, some 100 yards from the home bank. At around 1600 a very heavy barrage of artillery and mortar fire was put down on the defending bridgehead, and its commander ordered the troops back across the bridge. As no attack occurred, the very tired troops were ordered back to reform a defensive position on the far bank. After dark it was decided to move the firing point from its precarious position on the bridge to the home bank, and FID (fuse instantaneous detonating - an explosive core inside a thin lead tube of lead) was used to "fill in" the gap between the cable end and the ring main for the span.

It was unfortunate that both the GOC and CRE of 17 Ind Div thought that the bridge had long been prepared for demolition. The CRE must have been very worried. Of his three Field Companies in his Divisional Engineers, he had sent one (60 Madras), which had been in action at Moulmein/Martaban, back by rail to strengthen bridges for 7 Armoured Brigade, another (24 Bombay) had been in action at Thaton and the third (70 Bengal) had not yet arrived. 1 Burma Field Company had been temporarily under command, but had gone to Rangoon to prepare the oil facilities for demolition, so the only company available at short notice to prepare the bridge were the Malerkotlas, who were worn out, having been in action for 72 hours non-stop.

Ultimately, when it was apparent that any strong Japanese attack would probably not be contained, the Rearguard Commander (48 Brigade), gave orders for the bridge to be blown at about 0400 on 23 February. Two spans were dropped, the third was badly damaged. Both 16 and 46 Brigades were on the far side of the bridge when it was blown, and survivors struggled into Waw during the next few days. From twelve original battalions, they only mustered 149 Officers and 3,335 Other Ranks, a deficiency of around 5,000 men.

24 Company, after arriving at Rangoon, was moved to Hninpale by train. It then crossed the Bilin River on 7 February, and was in action at Thaton on 19 February during the withdrawal from Martaban to the Bilin River. One Section of 18 AW Company was placed under its command on 10 February, and the section very quickly learnt to drive railway engines, operate saw mills and

drill boreholes for demolitions. 24 Company then prepared the village of Kyaikto for demolition, after demolishing the bridge over the Bilin River and was then ordered to cross the Sittang Bridge to destroy all ferries and sampans in the vicinity. In this last task it was again greatly assisted by the Section of 18 AW Company. It was ironic that the Officers' Mess 30cwt truck of HQRE 17 Div blocked the bridge for some three hours during the night of 21/22 February, when it partly slipped off the temporary decking laid on the bridge. The accident was compounded by the fact that the CRE (Lt Col AE Armitage) refused the offer of help from the OC of 24 Company to clear the truck from the bridge. Shortly afterwards, the CRE was evacuated sick and replaced by Lt Col RSB Ward, previously the OC of 1 Field Company Burma S&M.

Withdrawal from Rangoon to Prome/Allanmyn

After the Sittang battle 46 Brigade was disbanded and 17 Div consisted of only two brigades (16 & 48) until the arrival of 63 Brigade at Rangoon on 5 March. On 19 March 1 Burmese Corps was formed under the command of Lt Gen WJ Slim, who had been the GOC 10 Ind Infantry Div in Iraq. Its purpose was to command the two weak divisions (1 Burdiv and 17 Div), whilst the Army Commander liaised with the Chinese forces and GHQ India.

After the creation of 1 Burcorps, the organisation of Engineer units was

- 1 Burdiv - 50 (Madras) Field Park Company; 56 (Madras) Field Company (less two sections); Malerkotla Field Company
- 17 Ind Div - 24 (Bombay) Field Company; 60 (Madras) Field Company; 70 (Bengal) Field Company
- Corps Troops - 1 Burma Field Company; 17 & 18 AW Companies
- LofC Troops - two sections of 56 (Madras) Field Company

Initially the prime objective of Burma Command was to hold Rangoon for as long as possible. If this were not possible, then the Allied Forces must withdraw for the defence of upper Burma to safeguard the oilfields of Yenangaung, to keep contact with Chinese forces and to protect the construction of a road from Assam to Burma.

7 Armoured Brigade landed at Rangoon on 21 February. It had to unload its tanks, vehicles and stores by itself, as no dock workers had remained in the docks. This they did, but it was quickly apparent that Rangoon could not be held for much longer, so Gen Alexander, GOC in C Burma, gave the order to withdraw up the road to Prome on 6 March. When the withdrawal started, it met a strongly defended road block at Taukkyan 24 miles north of Rangoon. Two attacks on the block were repulsed. A third was mounted on 8 March, which was much more strongly supported, but found that the block had been evacuated. The Japanese Commander had been ordered to attack Rangoon from the west side, establishing the block so his main force could cross the Rangoon - Prome road unimpeded. This done, he withdrew the block!

In order to assist 17 Div in their withdrawal from Pegu towards Rangoon, Burdiv advanced south from Toungoo. 1 Burma Brigade was ordered to capture Pyuntaza and then exploit southwards towards Daik-U. 2 Burma Brigade likewise was ordered to capture Madauk and Shwegyin on the opposite sides of the Sittang River, the latter on the far (east). The Malerkotla Field Company constructed rafts, using country boats and 44 gallon oil drums. These had been by rail from Toungoo, but the train crashed and the company had to collect them by MT. However it was found that the rafts made using the drums were unmanageable due to the current of about 4 knots, so they were scrapped. The company ferried over 5/1 Punjab during the night of 12/13 March, 7 Burif having first established a bridgehead. They captured Shwegyin by 1030 after 7 Burif had captured Madauk. 1 Burma Brigade failed to break through a road block south of Pyuntaza, and to compound the situation, a platoon of 5 Burif deserted whilst acting as a guard for a mountain battery. The gunners had to retire quickly, so the infantry battalion was without artillery support to hold up the Japanese counter-attack and it was forced to withdraw. Consequently the forces at Shwegyin and Madauk also had to withdraw, the Malerkotlas ferrying the 5/1 Punjabis back across the Sittang. 1 Burdiv then withdrew back to Toungoo.

On the way back the Malerkotla Company carried out two tasks. One was the preparation and execution of route denial demolitions, including the preparation by 2 Section of the main road and rail bridge at Pyu, where the Chinese forces were concentrating. These two bridges were jointly demolished with the Chinese Engineers as soon as the rearguard of 1 Burdiv had crossed. The section, after handing over some explosives to the Chinese Sappers, withdrew to rejoin up with the company, already on its way north. The second task was to operate three railway trains to shuttle stores etc back to Toungoo. All the drivers had refused to drive south of the place, so the sappers had been asked to improvise. Lt Hudson the 3 Section commander pre-war had actually ridden with other schoolboys on the footplate of a steam railway engine between Brookwood and Bisley stations whilst shooting at the Bisley ranges. Accompanied by Nk Sardar Ali Shah, a qualified steam roller driver, who was appointed driver of one train, Lt Hudson set off driving to Nyaunblegin to contact 2 Burma Brigade to collect what stores were available for backloading. A regular stoker had volunteered assisted by four sappers. A train could carry up to 200 tons per load. One day 10 tons of Red Label whisky were among the stores carried, some of which went with the Malerkotlas. Engine driving is hot, dirty and exhausting work. One day Lt Hudson found a very neat small railway carriage, for use by the Inspector of Bridges for Southern Burma which had now been occupied by the Japanese. It was luxuriously equipped with a bunk, fans, a paraffin operated refrigerator, bathroom, kitchen complete with a cook. Thereafter he travelled in luxury, having first given the green signal to his sapper driver.

Similarly 24 Company carried out route denial demolitions on the road back to Prome, but did not operate any railway trains.

After consultations with the Chinese, it was agreed that Chinese forces would advance to hold Toungoo, whilst 1 Burdiv moved to Allanmyo some 30 miles north of Prome, so Burcorps could concentrate in that area, as it was dangerously spread out on both sides of the Pegu Yomas range with a gap, of almost 100 miles between its two divisions.

The Japanese mounted a strong attack on the Chinese forces holding Toungoo on 23 March, capturing the town on 30 March. In withdrawing the Chinese failed to demolish the bridge over the Sittang from Toungoo to Mawchi and Bawlake. This gave the Japanese immediate access to the Karen Hills and the Shan States.

In order to relieve the pressure on the Chinese forces, Burcorps was ordered to mount an attack south from Prome towards Paundge and then on to Okpo. A force, under command of the Commander of 7 Armoured Brigade, which, apart from 24 Company, was composed of only British units. The attack stalled at Paundge and the Japanese got behind the attacking force, so it had to retire before becoming completely cut off. The force lost ten tanks and two guns and the infantry suffered many casualties. 24 Company's OC, Maj J MacG Smith was wounded together with 2Lt Hobbs and CSM C Poulter and Jem Daulat Khan was killed and 44 IORs became casualties. Maj Smith was badly wounded making a reconnaissance in a gunner quad, trying to find a way around the road block. Maj CVC Darley, a pre-war Territorial, was appointed OC in place of Maj Smith.

Withdrawal across the Irrawaddy river

The loss of Toungoo and the failure to blow the Mawchi road bridge was a major disaster, second only to that at the Sittang. It made the continued holding of Prome precarious, as the eastern half of the defensive line had gone. The town spread along the Irrawaddy for two miles. Inland it was bordered by jungle scrub and would have required a large perimeter to defend it. The Japanese had pressed up and occupied part of the opposite (west) bank of the river, and the railway also stopped at Prome, so road was the only means of further supply or withdrawal. Lastly there was a report found to be false later that a Japanese force was approaching Dayinbado 16 miles north of Prome. The matter was settled on 1 April when the Japanese attacked Prome, penetrating the town centre. 17 Div withdrew, but was ordered to hold Taungdwingyi, some 50 miles NE of Allanmyo, where 1 Burdiv had previously concentrated, but similarly was now ordered to withdraw to Magwe. In addition, 2 Burma Brigade was ordered across the Irrawaddy River to form the right flank guard. Water availability dictated brigade positions.

After handing over engineer tasks in the Toungoo area to Chinese troops, the Malerkotlas moved by road to Meiktila, where they were able to repair transport that had broken down, and replenish stores and clothing from army

depots in the town. The unit then started on its move to Allanmyo. It bivouacked for two or three days south of Magwe, which had just been evacuated by the RAF. The opportunity was taken to salvage four 3 ton RAF lorries, much improving their transport situation.

The Japanese attack against Magwe and the oilfields at Yenangyaung started on 11 April, driving 1 Burdiv back. The oilfields and the adjacent refinery were destroyed on 15 April. The preparation for demolitions had been started on 9 April, but their execution had not been tightly co-ordinated with the military plan. Empty unused 44 gallon drums were just saved from destruction, so they could be used to supply water points. The temperature was around 110 degrees and water was very scarce indeed, being taken from swimming pools and even radiators of broken down vehicles. The total sapper force, drawn from the Malerkotlas and 56 (Madras) Field Company, totalled around 6 officers and 200 sappers. The lift and force pump became a very useful tool to abstract water from the banks of the Irrawaddy and the very few wells that were found. Both field companies were deployed as infantry to man part of Burdiv's perimeter. In one instance a refinery pipeline, some 15ft off the ground, was hit and a small dribble of water flowed out. Everyone was very dehydrated and some 100-120 soldiers got some water from this unexpected source, but it soon ran dry. Finally Burdiv fought its way out across the Pin Chaung (2 miles north of Yenangyaung), some 500 yds wide, with water channels 8 ins deep. It had been a desperate situation. To quote from the Regimental History of the KOYLI "anyone who was in Yenangyaung on 18 & 19 April 1942 must have a clear idea of what the Hell of the Bible is really like". 1 Burdiv was shattered and was sent to Mt Popa area to recover, and thence over the Irrawaddy to regroup around Ye-U.

1 Burdiv, less what heavy MT that it had left, was ferried over the Irrawaddy at Sameikkon, with the help of RIN Officers and ships of the Irrawaddy Flotilla Company. About 20 boats were used, the operation taking two days. The Malerkotlas then sank every craft that remained after the ferrying had been completed. The heavy MT was sent to the Ava bridge to cross the Irrawaddy. The Ava bridge (some ten miles from Mandalay) was the only bridge across the Irrawaddy between Rangoon and Myitkyina.

3 Section of the Malerkotlas was given the task of sinking a number of large steel barges called "Flats", as part of a scheme to block the main channel of the Irrawaddy, just above where the Chindwin flowed into that river. The Section Commander was awaiting a launch to ferry him to a conference on board the Naval Commander's HQ ship, one of three sizeable vessels, when he noticed a 40ft cloud of brown dust, approaching from the west. He had just boarded the ship, when a strong wind hit it. Luckily there was a launch on either side of the ship, and, after starting his main engines, the ship's captain just managed to keep the ship's bows nudging the river's west bank. Visibility went down to 10 yards. After some 15 minutes the violent dust-storm abated.

One of the ships had disappeared with all those on board. Several Royal Marines had been drowned, but those sappers that were on board, had managed to get to the eastern bank safely. The blocking plans were abandoned.

On arrival at Ye-U, the Malerkotlas were very appreciative of the welcome given to them by 70 (Bengal) Field Company.

In the meantime, with the cutting of the Magwe/Taungdwingyi road and the advance of the Japanese forces up the Loilem road, the position of 17 Div caused concern. The Army Commander refused permission for Taungdwingyi to be evacuated until 25 April. His reasons were political as he did not want to upset the Chinese by giving up the town, despite the fact that their forces had never taken over its defence. 17 Div and 7 Armoured Brigade then had to move rapidly to secure the Ava bridge before it was captured, as it was the only available bridge over the Irrawaddy. This they did and the rearguard (48 Brigade) smashed a strong Japanese attack at Kyaukse on 29/30 April, giving time to withdraw unmolested over the Ava bridge, which was blown at 2321 on 30 April.

Engineer Operations

After the disastrous counter-attack south of Proine at the end of March, 24 Company was ordered to Allanmyo on 1 April. They moved back, transporting engineer stores to Magwe and then on to Taungdwingyi, where they assisted in preparing the town's defences. Secondly, in case the road to Magwe was cut (as it later was), they converted the railway track north into a motorable track by removing the railway lines and used some 5000 sleepers to improve the access to and from the Yin Chaung which was a dry water course which started just north of Taungdwingyi. The Corps Commander complemented them on this task.

The company then prepared a number of bridges for demolition. Pawhung rail bridge was blown on the OC's orders by 2Lt Crawford at 1930 on 26 April; Myitne road and rail bridges and Wytng road bridge were blown on 29 April by 2Lt Rhodes on the orders of Commander 63 Ind Inf Brigade. The Myitne rail bridge was very important as it carried the railway to Lashio. Both bridges at Myitng had to be blown simultaneously as they were close together.

Their original demolition had been planned by Maj Stack, the Commandant of the Burma S&M depot at Maymyo. The Japanese, after occupying the area, made a very large effort to repair the rail bridge, so that they could supply their forces advancing towards Lashio, their first train crossing the bridge on 30 May 1942. Unfortunately only one span of the rail bridge had been dropped (due to a misfire), which greatly eased its rebuilding. The Ava road and rail bridge was blown by 2Lt Mackay on 30 April on the orders of GOC 17 Ind Inf Div. The roadways were mounted on brackets on either side of the rail element, and was the largest bridge in Burma. Two complete spans were dropped into the river.

This bridge carried both the railway and road supplying Myitkyina in north Burma and was not repaired until 1955.

Withdrawal to India

On 28 April the Army Commander issued a Directive for Burcorps to withdraw to India. The planned route, except for 2 Burma Brigade, was a mixture of boat to Monywa and on to Kalewa, or overland via Ye-U and Kaduma to Shwegyin, ferry to Kalewa and then overland up the Kabaw valley to Pael and Imphal. 2 Burma Brigade would continue up the west bank of the Irrawaddy, then up the Myittha valley to Kalemmyo. 1 Burdiv made for Monywa, but the Japanese arrived there first. The Malerkotla Company, together with the Madras 50 and 56 Companies were given infantry roles to patrol the river bank up to Monywa. On 30 April the Japanese opened up with heavy mortar and machine gun fire from the river bank opposite Monywa. The Madras companies suffered many casualties. 2Lt Lamerton of the Malerkotlas was wounded in the knee (he later died), together with four sappers. On 1 May the Japanese crossed the river and occupied the town. Burcorps hastily arranged a counter-attack, which was mounted on 2 May and re-captured Monywa, having fought the Japanese to a standstill. Luckily the six largest stern wheelers of the Irrawaddy Flotilla were unharmed as they had been at Kalewa, ferrying refugees across the Chindwin. On 4 May the majority of Burcorps had reached Ye-U, preparatory to the long march to Shwegyin.

A race then developed between Burcorps and the Japanese to get to Shwegyin first before the onset of the monsoon. Burcorps won and Shwegyin was secured, however only one tank of 7 Hussars was ferried across to Kalewa. This tank, called the "Curse of Scotland", became the command tank of 7 Light Cavalry and was fought all the way back to Rangoon, as part of 255 Tank Brigade in 4 Corps. The Japanese then attacked Shwegyin, but were fought off. The rest of the tanks and guns after firing off any remaining ammunition, together with all the transport left, were destroyed. The weary troops then marched to Kaing, where they crossed the Chindwin to Kalewa and then onwards up the Kabaw valley to Tamu, Pael and finally Imphal.

2 Burma Brigade during the retreat through Yenangaung, was on the west bank of the Irrawaddy, protecting the far western flank of Burcorps, moving mostly by night to avoid bombing. However the Chin Hill Battalion of the Burmese Frontier Force had destroyed most of the bridges over the many chaungs, which meant unloading all the stores from bullock carts, manhandling them over the chaung, finding a way across for the carts and then re-loading them. They finally made contact with the Battalion just south of Kalemmyo. It had marched 216 miles in 14 days. At its first engagement at Moulmein, the brigade was about 5,800 strong. Only 480 arrived in India. 2 Burif was the only unit to arrive in strength.

The Malerkotla Company, less one Section, on leaving Ye-U, marched to Kaduma, being bombed on the way. The detached section prepared and blew some final demolitions, being transported by the tanks of the rear guard (2 RTR). The company then moved to Shwegyin, partly marching, partly by transport, to come under command CRE LofC. They built a raft using country boats to assist in ferrying tanks across the Chindwin and improved the road from Kalewa to Kalemmyo, until relieved by 17 Div sappers. The company then marched up the Kabaw valley to Tamu, assisted by a truck carrying their cooking equipment and what stores they had left. Resting at Tamu for two days, they then marched to Pael, involving climbing some 5,000ft over the Shenam saddle from Kalewa to Pael, which is 132 miles. From Pael they were transported to MS108 on the Imphal/Dimapur road some 20 miles north of Imphal.

Throughout their withdrawal from Tennaserim to Kalewa, the company had carried out many denial schemes using explosives, sledgehammers and removing vital parts of machinery. Standard practice for steam engines was to remove the eccentrics and slide valves, or put 3lbs of explosive on the steam chest. For fire tube boilers the injectors were removed and 5lbs of explosive put in the drum through the inspection covers, which were then replaced. Explosive charges were put in diesel engines against the cylinders. A large number of rice mills were destroyed as southern Burma was the main rice producing area of the country. Machinery in quarries was also destroyed.

24 Company on leaving Ye-U, constructed water points at 30 mile intervals on the road to Kaduma, Pyingaing and on to Shwegyin. On 5 May it was ordered on foot to Shwegyin, destroying about forty abandoned vehicles on the way, including the Army Commander's car. The company arrived at Shwegyin on 9 May and was ferried over to Kalewa during the night, then marching to Yazguyo and the next day to Khampat, some 30 miles further. This last camp was so filthy, that the OC ordered them to march on a few miles to a clean site. They were then moved by transport to Tamu, marching over the Shenam saddle to Lokchao with only one man falling out and on again on 17 May to Tengenupal. On the way they marched past their Corps Commander by Sections led by their officers. The Commander remarked that "It was the best that he had seen". Next day they went on to Pael, where they were lifted by transport to Kanglatonghi, 30 miles north of Imphal, where they had to camp in the open. The monsoon started on 12 May.

India Command had greatly assisted in the withdrawal of Burcorps by creating a road forward from Pael to Tamu, with little equipment, at the end of a very long LofC from Dimapur (some 150 miles to Pael). However the reception of Burcorps by Eastern Command and 4 Corps was disgraceful. The soldiers of Burcorps were worn out and their Corps Commander estimated that some 8% of the fighting troops that came out of Burma subsequently died.

Conclusion

To quote the Burcorps Commander "I stood on a bank beside the road, and watched the rearguard march into India. All of them, British, Indian and Gurkha, were gaunt and ragged as scarecrows. Yet, as they trudged behind their surviving officers in groups, pitifully small, they still carried their arms and kept their ranks, they were still recognizable as fighting units. They might look like scarecrows, but they looked like soldiers too."

The names of officers mentioned in the War Diaries are:

Malerkotla Field Company

HQ - Maj RC Orgill (OC), Capt HJ Corfield (21C), Sub Godham Ramu, Jem Kushi Nohd, Jem Khalil-ur-Rehman Khan (1st line reinforcement)
 1 Sec - 2Lt DR Lamerton, Jem Rehmat Ali Khan
 2 Sec - Lt Bashir Ahmed Khan RIE, Sub Bahawal Khan
 3 Sec - Lt ERB Hudson, Jem Shiv Narain

Its total strength was 289 all ranks. It had many deficiencies in its equipment, in particular compressors, camouflet sets, exploders and welding equipment.

24 Field Company

No nominal roll is given in the War Diaries that survived, but officers individually listed are given below. It is not known if they served with the company throughout the Retreat or joined as reinforcement officers.

Maj JMacC Smith - wounded and evacuated 31 March
 Maj GVC Darley - wof 1 April
 2Lts AB Rhodes, Crawford, Mackay and Hobbs (wounded and evacuated 31 March)



Mules fording Chaung

CHAPTER FIFTEEN

ASSAM BUILD UP

JUNE 1942 TO MARCH 1944

20 Div

HQ Engrs

92 (RB) Field Company

481 (RB) Field Company

91 (RB) Field Company

HQ

363 (RB) Field Company

402 (RB) Field Company

305 (RB) Field Park Company

24 (RB) Field Company

9 (RB) and 15 (RB) Bridging Sections

23 Div

457 Forward Airfield Engrs

4 Corps Troops

Compiled by Lieutenant BH Larkins

The main sources for the material concerning the RB units are their war diaries and the memoirs and memoranda of their officers: Brigs JRG Finch OBE and AP Lavies CBE, Lt Cols MH Briggs, PM Leslie Jones and WL Sheldon, Majs GB Dawson, WR Faulds, AN Fradgley MBE, RCH Greet and WG Prow, and Capts RBWP Chambers and SR Holt. The principle background sources are those acknowledged collectively for Part IV (Burma) and articles published in the RE Journal by Brigs HF Horsfield CBE, MC (Sept 1945), R Gardiner CBE (June 1948) and POG Wakeham OBE (Sept 1946).

Military Situation - to March 1944

The Japanese had been at war in China since 1935 and supplies to the Chinese had been sent to them along "the Burma Road" which had been built in the years 1938-39. The Japanese attack on Pearl Harbour on 7th December 1941 was followed quickly by their attacks on Hong Kong and Malaya (Chapter 13), which achieved rapid success. The attack on Burma followed, resulting in the British, Burmese and Indian forces retreating into Arakan and Assam, the Japanese reaching Kalewa on 12th May 1942 (Chapter 14). The successful Japanese attacks on the territories around the China Sea and Burma meant that the supply routes to China were cut, except that through Assam.



Repaired Railway Crane
Maymyo

In April 1941, Germany had attacked Russia. Railway locomotives and rolling stock, and IWT vessels had been sent from Assam to Iraq to assist the transport of supplies onward through Persia into southern Russia. This transfer of vessels and rolling stock was to prove to be at the expense of the defence of Assam and Arakan. Many troop reinforcements originally intended for India were sent instead to Madagascar, and to the Middle East, as well as to support the supply route to Russia through Iraq and Persia.

The Eastern Army for the defence of India against the Japanese expected to contain their advance from Burma into India. The Army comprised 4 Indian Corps, under Lt Gen NMS Irwin in Assam and 15 Indian Corps in Arakan and Bengal. 33 Indian Corps was held west of Calcutta as a strategic reserve. There was also a Chinese division in the extreme eastern part of Assam, which was reinforced by air by another 13,000 men making a second division.

On 20 May 1942 the Burma Army (under Lt Gen Sir Harold Alexander), which had comprised 17 Indian Light Div and 1 Burma Div, ceased to exist. Lt Gen William J Slim was appointed to command 4 Corps; later he commanded the 14th Army, comprising 4 and 15 Corps. 4 Corps was to hold the frontier with Burma of some 500 miles, with the Imphal Plain behind it. Further back was Kohima, which became a fortified base, and further still was the only railhead at Dimapur.

Fortunately, the Japanese forces in North Burma at the time when the 1942 monsoon was breaking, were as exhausted as the Allied troops withdrawing through 4 Corps. Of the 25,000 strong Burma Army, less than half reached India. 17 Div on their way towards Imphal, had come out through the Chindwin and Kabaw valleys, and the troops were suffering severely from malaria, which was particularly prevalent there. With 17 Div was 24 (RB) Field Company, which returned at the end of May 1942 to Kirkee and did not return to Assam until October 1942.

The divisions then comprising 4 Corps were 17 Div (Maj Gen DT Cowan), 23 Ind Div (Maj Gen RA Savory) which was ordered there in May 1942, and a brigade in north east Assam. 20 Ind Div joined them in late 1943. 5 Ind Div did not arrive until late in March 1944, after the Japanese attack earlier that month.

The Commander-in-Chief, India, General Sir Archibald Wavell, was already making plans for the recovery of Burma and Malaya, even while the Japanese were advancing into Burma. A pre-requisite for such a campaign to recover Burma was the strengthening of the very long LsofC and in particular the construction of roads. These same LsofC were used also for the supplies going through Ledo, towards the eastern extremity of Assam, and over the Pangsau Pass to China.

A difficulty, which had to be accepted, was that the Burma front had a low level of priority, compared with operations in Europe, the Middle East and the Pacific. Many locally planned operations had to be abandoned for want of men and supplies of all kinds. At one stage there was even a call for some artillery ammunition to be sent back to Europe. In early 1943, there were reports that fuel for vehicles was in short supply, and for a time later in the year petrol was rationed.

Because of the totally inadequate transport system, the supply situation became so bad that the troops of 4 Corps had to be put on reduced rations with the result that many thousands of them became sick. Much reliance had to be put on air transport, a means of transport then still in its infancy; fortunately aircraft could be used on their return flights to evacuate some of the casualties - much to the benefit of morale. The need for airfields was such that a building programme of about two hundred airfields for the LsofC in the Brahmaputra valley and in forward areas had to be instituted. The programme was more or less complete by the autumn of 1944.

The need for fuel for the vehicles and the aircraft was so great that the building of pipelines to transport the fuel had been recognised as essential.

The task of building adequate LsofC, including the many airfields, was undertaken by the Military Engineering Services (MES) with the assistance of any Field Engineer units that were available. In April 1943 the MES organisation was taken over by the General Reserve Engineer Force (GREF) to be responsible for construction and maintenance of all the airfields, roads and pipelines.

The road programme in forward areas included routes to the Chindwin River via Tiddim and via Tamu. The latter was given greater emphasis later when the 23 Div was to make a feint attack at Kalewa by the 49 Ind Infantry Brigade as a cover for the expedition 1st Long Range Penetration Group (the Chindits) under Brig Orde C Wingate. They were also known as 77 Ind Infantry Brigade. The Chindits were to cross the Chindwin at a number of places in February 1943, and penetrate deep into Burma in the first expedition known as Operation "Longcloth".

The creation of South East Asia Command was effected on 16th November 1943 with Admiral Lord Louis Mountbatten as Supreme Commander, and Lt Gen WJ Stilwell (US Army) as his deputy. The former Eastern Army was split into the Eastern Command in India, and 14th Army in Burma under Lt Gen Sir William Slim. Having also commanded 15 Corps in Arakan for a period of four months, he assumed this new command. Gen Sir George Giffard became Commander 11th Army Group of which 14th Army was a part. The Commander of 4 Corps became Lt Gen Sir Geoffrey Scones based on Imphal. His divisions then were 17 Div near Tiddim, and 23 Div near Tamu. On the arrival of 20 Div (Maj Gen DD Gracie), it replaced 23 Div (less 37 (Gurkha) Brigade which

remained for another three months). 23 Div had been much weakened by sickness and it was withdrawn to the Imphal plain, later forming part of the defence against attack from the north of the Kabaw valley. In August 1943, Maj Gen OL Roberts (a former Royal Engineer and Sapper and Miner officer) became GOC 23 Division.

The Allied plan was to withdraw as the Japanese advanced, thus stretching their LofC, so that the Allies could concentrate in fortified bases at Imphal and Kohima which could be supplied by air.

Geography and Climate of Assam, the Imphal Plain, and the hills, including the inadequacy of the communications

A major feature of the landscape of north-east India is the River Brahmaputra, which flows from the north-east of Assam westwards until it turns southwards, and then joins the Ganges. These rivers then flow south through the delta into the Indian Ocean. The Brahmaputra was navigable, but without a bridge for some 1,100 miles downstream of Dibrugarh. Although it is difficult to keep some channels open in dry weather, in the monsoon the Brahmaputra is liable to rise 25 feet in the rains and become up to 25 miles wide in places, changing its course by several miles either way. Except for one spot near Gauhati, it flows through alluvial plains and its course changes from year to year and even from month to month.

Early in 1942 there was no all-weather road connecting Assam with the outside world, nor any into Burma. There was a road from Pandu to Dibrugarh with a link to Dimapur and thence a further 152 miles via Kohima to Imphal. At that time the use of this road was limited to taking traffic to and from the IWT route which was to prove to be a most valuable feature of these complex LsofC.

Until 1942, the far from simple rail system, the river, and the limited road system were adequate to deal with the light peacetime traffic, which largely supported the tea plantations and some oil production at Digboi. However, they were totally inadequate to cope, not only with the sick and exhausted troops withdrawing from Burma, and some two hundred thousand refugees, but also with reinforcements of troops, fuel and other supplies flowing in the reverse direction.

The railway system, which had been carrying only light traffic, suffered from the inflexibility of many of its block sections being up to 15 miles long. The chaos resulting from the overwhelming flows in opposite directions took weeks to clear. The IWT route from Dhubri and Pandu assisted to reduce the congestion, although inadequately to eliminate the chaos.

A difficulty for the engineer in the Brahmaputra valley is that there is little stone available locally. Hence there was a colossal logistical problem in the transportation of huge quantities of materials, needed for road and airfield construction, at a time when the LsofC were already overloaded.

The Chin hills, south of Tiddim, are a tangled mass of rugged broken country covered with scrub with peaks up to 5000 feet. The Naga Hills, further north, are jungle clad and some of them rise to 7000 feet or more. The landscape may be described as "corrugated" with valleys having very steep sides and thick jungle on the valley floors and lower slopes. The Imphal plain is at an altitude of about 3000 feet, surrounded by dense jungle clad mountains. The Manipur river flows south, through a gorge, bordered by mountains up to 8000 feet to Tamu in the Kabaw valley which has teak forests and steep slopes, clad in dense jungle. The density of the vegetation with interlacing vines and trailers and undergrowth of wild rose, ferns and the like, together with the dangerous wildlife - buffaloes, elephants, panthers, rhinoceroses, and tigers - made the jungle a most difficult terrain in which to live - and to fight (see Manipur State panorama Chapter 18).

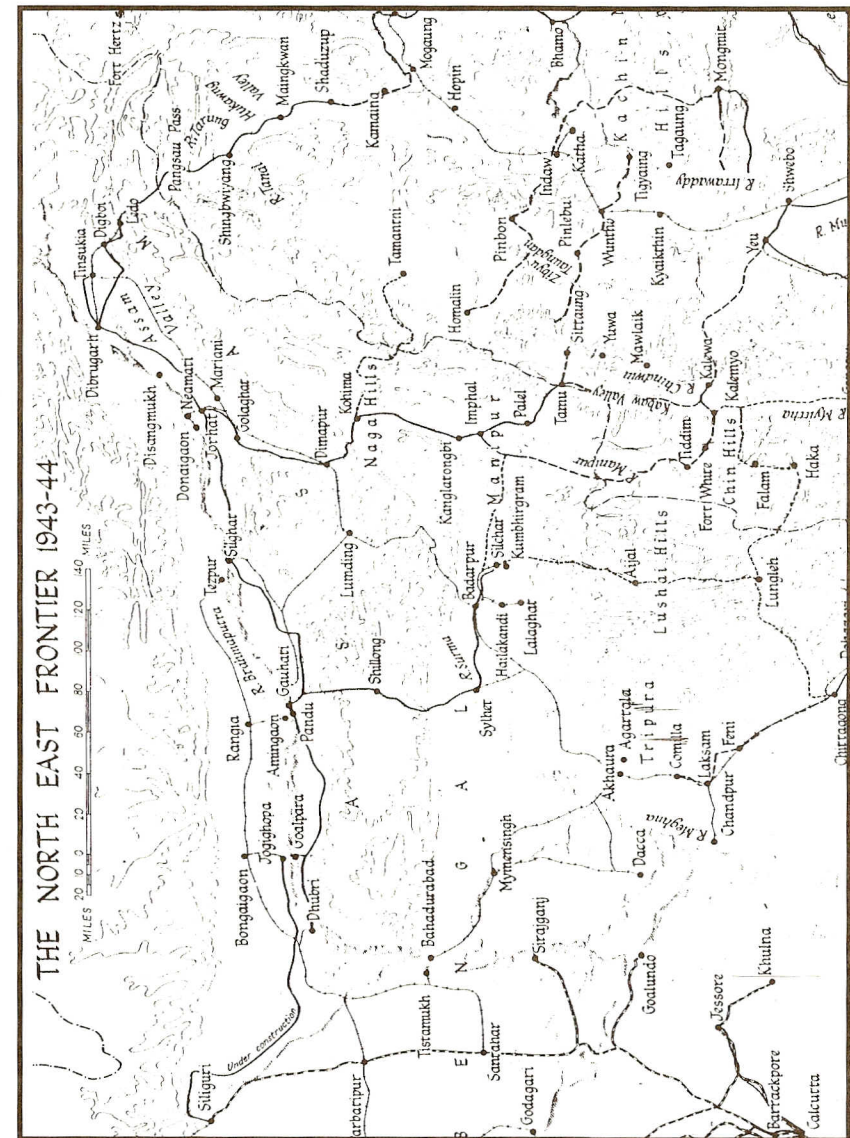
With the inadequacy of roads, vehicles and fuel to power them, elephants proved to be useful as were bullock carts driven by local people willing to work, although both were slow. Mules too were used, but they were underfed because of the lack of adequate food for them (and the troops) and they became diseased and were sometimes literally worked to death.

The climate is mainly affected by the monsoon, which brings very heavy rain on south-west winds in the early summer and again in the early part of the year, but with winds from the opposite direction. The annual rainfall is almost the heaviest of anywhere in the world. Hence roads, bridges and railway lines were often washed away. By way of example extracts from the War Diary of HQ 23 Div Engineers in June 1942 included: "Heavy rain-Temporary bridge over Palel river washed away-Ford impassable-Road Palel-Shenam blocked in 5 places by landslips-Thoubal river in spate-Diversion impassable-one RCC pier of new bridge under construction washed away-Main road under water". In the wet seasons boxes of matches became damp and useless, no matter how much care was taken to prevent this. It was found that a cigarette lighter was more reliable. The monsoon also made flying extremely hazardous; violent disturbances could pull planes down thousands of feet in a few seconds and wrench their wings off.

Malaria is a disease endemic to Burma and Assam, and is particularly debilitating and recurrent. Scrub typhus and the amoeba of dysentery were also serious diseases. The high humidity and the heat were also enervating. An anti-malaria drug, Mepacrine, first became available to troops in the autumn of 1942, but it was not available to the Japanese. Before this drug was in use, 120 disease cases were admitted to hospital for each admission because of wounds; by 1944 the proportion had fallen to 20 to one.

Development of Railways and Waterway from 1942

The LofC to Assam began at Calcutta, either at the docks for arrivals by ship, or from the railways across India which connected with the broad gauge (5ft 6in) tracks. Thence the LofC ran north and then east, either by the river Brahmaputra, or by rail.



The peacetime railway system was complicated with several feed-in points and alternative routes. From Calcutta there was a broad-gauge line to Parbatipur where it is joined by a metre-gauge line from the west - involving trans-shipment. From there a single track ran eastwards to Amingaon, on the right bank of the Brahmaputra, where there is a wagon ferry to Pandu. The line then ran from Pandu, through some of the worst malarial country in the world but also with several heavily graded lengths, to its terminus at Ledo, with numerous cross-links with the IWT route. Limiting factors were the then operating standards, the paucity of station and terminal facilities, the very long block sections, and the total lack of telecommunications; a system was installed in 1943, but with the shortage of materials - much of the wiring was second-hand - reliability was spasmodic only.

The supply to the build-up of troops was a large task on top of which was the immense task of moving the vast loads of construction materials for the railway - some 1,125,000 tons, including bricks, sand, gravel, ballast and other permanent way materials.

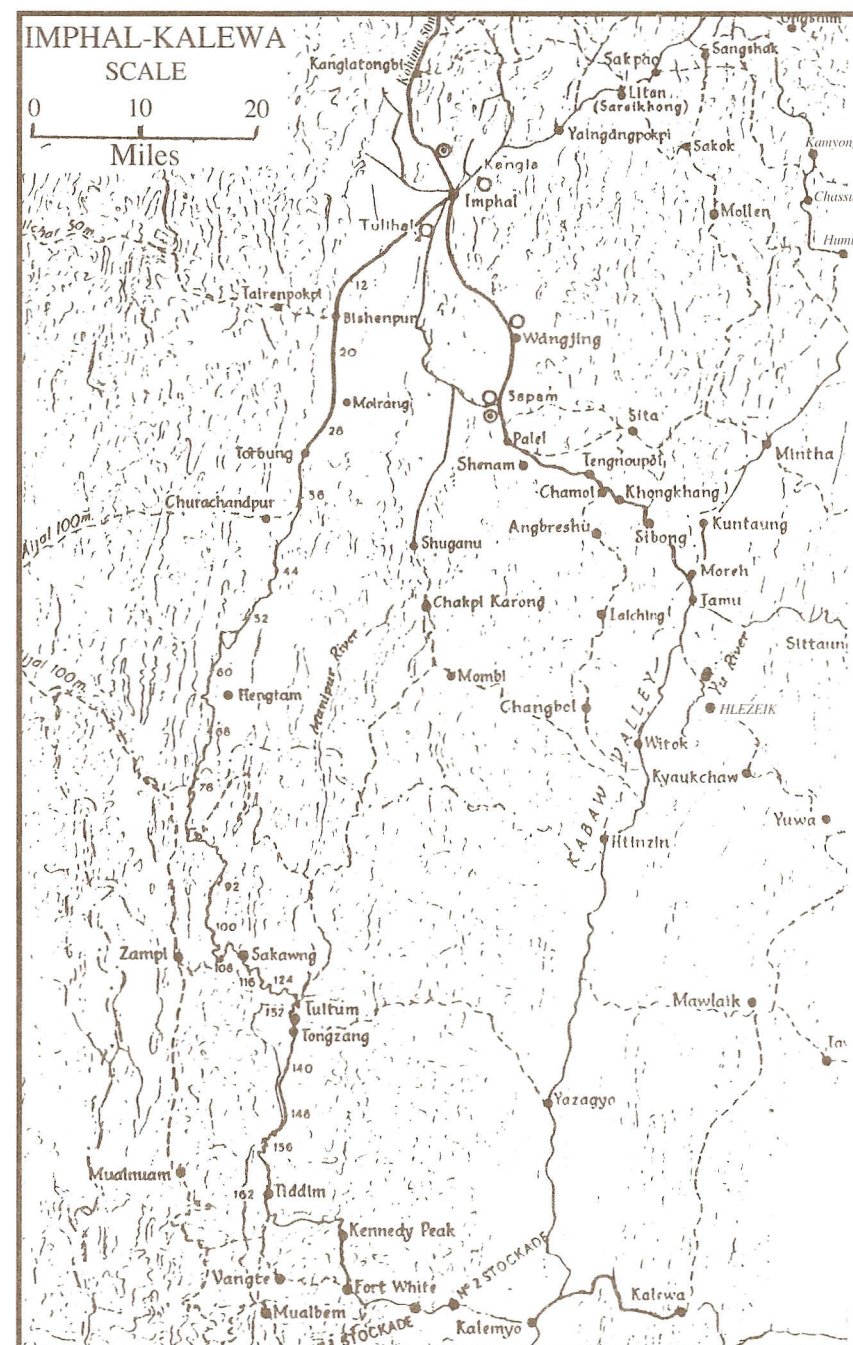
The railhead for the operations in Assam was on the metre gauge line east of Gauhati, via Lumding, at Dimapur. From there was a very winding road to Kohima and on to Imphal.

Road and track network behind the forward areas

The Burma road had been built in 1937-38 from the port of Rangoon in southern Burma as a supply route into China. The supplies were first carried by rail to Lashio (125 miles NE of Mandalay), and then by a fleet of some 3500-4500 lorries on the road ranging from 3,200 to 8,500 feet through the mountains to Kunming, the capital of the Chinese Yunnan province.

There were few roads in northern Burma and communications relied on the railways, which ran as far north as Myitkyina, about 200 miles east of Imphal and to Lashio in the east. The Irrawaddy was navigable with a regular steamer service to Bhamo, and its tributary, the Chindwin was navigable as far north as Tamanthi, and further for country boats. The Burma road was cut in April 1942 by the Japanese advance through Burma. Hence the crucial importance of the Assam trunk road, with the railway system and the IWT, for the maintenance of the new supply route through Ledo to China, until airfields could be constructed.

In 1942 the Assam trunk road ran from Goalpara through Gauhati, Jorhat, Dibrugarh, Digboi and Ledo, with a lesser link at Jorhat to Dimapur, Kohima and Imphal. There was a road of sorts from Gauhati to Shillong, which continued on southwards to Sylhet and then eastwards to Bardarpur and Silchar, some 114 miles to the south-east. All of these roads were of low capacity with the bridges limited to 3-ton lorries. From Silchar there was a mule track only, over a suspension bridge, to Bishenpur, where it joins the road to Imphal.



With the sudden growth of traffic, the maintenance of these roads and tracks, in addition to the improvement and extension of them, was a huge problem largely assumed by the Army. One means of alleviating the problem was the construction of the Assam access road from a railhead at Siliguri on the broad-gauge part of the railway, and the construction of an IWT off-loading point at Jogighopa. From there as many as possible of the vehicles went on their own wheels to their destination, thus relieving the congestion at the Amingaon-Pandu ferry. This project required a MT ferry across the Brahmaputra between Jogighopa and Goalpara.

Through the Chin Hills a rough road to Tiddim, 165 miles from Imphal, had also been cut. There were no waterways but many defiles through which all the supplies had to pass.

A major task for 24 (RB) Field Company under Maj GVC Darley, after its return to Assam in October 1942 and then under 16 Indian Infantry Brigade, was to build a bridge five miles east of Ledo. At that time the unit had 15% of the personnel suffering from malaria. Work began on 2nd December 1942; the Hamilton bridge, on a very restricted site, was to have three spans - one of 140 feet and two of 100 feet. For details see Appendix B. They also worked on some other small bridges in the area.

On 7th March 1943 the bridge was set in its final position and the first large convoy crossed on 24th March. A detachment of 24 Company remained at Digboi, and the remainder was ordered to Imphal to work on the Imphal-Tamu road under 4 Corps Troops Engineers.

Airfield and Landing strip construction

Because the road, rail and river systems in early 1942 were so inadequate to supply the troops in Assam, to enable supplies to be delivered to the Chinese, and there were so few airfields in eastern India, the MES was given the task of building 200 airfields. These were to be built in the forward areas mainly for fighter and reconnaissance aircraft and in the Brahmaputra valley for bombers and transport aircraft.

As an airfield needed about 2,000 tons of stone, or the equivalent of 60 miles of concrete road, additional quarries and stone crushing plant had to be set up; the movement of this plant and the material added to the need for improved LofC. The absence of hardcore was such that the burning of bricks was tried.

In May 1942 24 Company worked on the all-weather airfield at Kanglatongbi on the Dimapur-Imphal road before returning to Kirkee. Another fair-weather Advanced Landing Ground (ALG) was being built at Kangpokpi on the same road; a Lysander aircraft landed there on 11th August 1942, the first landing on an airfield in Manipur State, and on that at MS128 on 24th August. The

Commander of 4 Corps, Lt Gen Scones visited these ALGs. There was another all-weather airfield at Samusang, two miles west of Imphal. On 11th November 1942, a Lockheed Lordstar aircraft, escorted by two fighters, arrived at Kanglatongbi bringing General Wavell and other officers. Shortly thereafter orders were given for the runway at that ALG to be both lengthened and widened. In December, the Kanglatongbi received 18 Hurricane fighter aircraft. The War Diary of GREF mentions that in July 1943 seventeen airfields were then being built under its aegis. Some 150 airfields were ready by the end of 1942 and ten squadrons based in the region. Offensive operations and aerial recce resulted in command of the air passing to the Allies.

Part of GREF included HQ 457 (RB) Forward Airfield Engineers. A number of engineer units worked under HQ 457 FAE. Shortly after their arrival at Imphal in April 1943 they were working on Imphal and Pael airfields. Civilian labour was employed on Imphal ALG, code named Inkerman, where the construction work was handed over to Lt GS Shah IE in May 1943. However the civilian labour was employed only between 1800 and 0600 - outside the normal hours of bombing by the Japanese. In June, 363 (RB) Field Company and a company of 70 Indian Army Pioneer Battalion arrived to work on Imphal airfield, and another company of that battalion arrived at Pael ALG. 402 (RB) Field Company also arrived for work at Kakching ALG alongside the Pael-Tamu road, near Pael (see Appendix A), where a runway 2000 yards by 50 yards was being built. The strip was bordered by stone filled blind drains and was made up of crushed and rolled stone bound by bitumen, and blinded with washed pea river gravel; there was an excavator/dragline operated by a British Mechanical Engineering Section. The stone came from hillside quarries, or river pebbles, which were crushed using petrol engine crushers. Labour to carry out the work also came from a West African pioneer company and tea plantation workers. A RIASC transport company arrived at Pael ALG with 60 3-ton Chevrolet trucks. Conditions were far from ideal for such work - at one time 65 vehicles were bogged down at a single point in the river. The rain and the works continued. By the end of October, a tar distributor having arrived, 1800 yards of the strip were completed, and on 1st November 1943 a squadron of aircraft arrived. The works were not completed before water tanks every 100 yards along the east side of the strip were built with a connecting canal and a stream was tapped into it to provide water for spraying on to the strip.

In September 1943, 363 Company began work on Tulihal all-weather ALG some 3½ miles SW of Imphal on the Bishenpur-Tiddim road. The work was completed in February 1944 as was that at Kangla Sipani Fair-weather ALG, some 8 miles north east of Imphal, on which the company had been working, and on yet another at Wangjing, some 14 miles along the Imphal Tamu road, where they took over from 402 Company. At that time another ALG was completed at Sapam, as was that at Tamu; surveys of two more strips at Witok and Moreh were in progress. In December 1943, a section of 402 Company moved to the strip at Ukhrul.

From time to time the work was interrupted by air raids such as on 9 November 1943 when there were raids on Imphal and Palel; 305 (RB) Field Park Company had two vehicles damaged at Palel.

The Sikh platoon of 402 Company then moved to a site five miles south of Tamu to create an airfield suitable for communications purposes and the use of light aircraft ambulances. To help in the task they were allocated a number of the elephants of Lt Col "Elephant Bill" Williams to drag the felled trees from the runway. The felling of the trees themselves was quite a task, especially those giants with a width of between 4-5 feet and a girth of up to 15 feet. It was not easy to cut them with explosives and to use axes demanded a team with a blacksmith and forge in support just sharpening the axes.

Pipelines

The movement of men and supplies of all kinds, over long distances and through difficult terrain by road required a large number of vehicles and hence vast quantities of petrol. Aircraft too required fuel, not only for operations against the enemy and the transport of supplies to the troops on the ground, but also for the airlift to China. It was soon realised that pipelines were needed, together with storage tanks, pumping stations and maintenance facilities. Not only would these move the petrol and the aviation spirit, but would also reduce the burden on the overloaded railways and IWT.

Two pipelines were laid, under American control from Budge-Budge port, near Calcutta, up the Brahmaputra Valley to the airfields the Americans were using for the supplies going over "the Hump". A pipeline was also laid, under the control of GREF, from the coastal ports of Chittagong and Chandpur northwards following the railway via Comilla, Agartala, Badarpur and Lumding to Dimapur. Extension southwards via Kohima, Imphal and Palel into Burma followed as the Japanese were driven out.

All the Indian Army Pipeline Units were provided by the RBS&M Group. Their history is recorded in Chapter 16.

Hospitals, workshops and other installations

Behind 4 Corps area and the US Army Air Force in north-east Assam there were many large works in addition to airfield construction inter alia the development of big bases including those at Pandu, Dimapur and Palel. The difficulties were enormous. By way of example, the only possible site for the base at Dimapur was in the jungle. Tunnels had to be cut through the dense trees and foliage for sight lines for theodolites; in the event of obstruction, a new tunnel had to be cut.

In July 1942 work was in progress on the construction of the advanced base at MS118 on the Dimapur-Imphal road, and the Engineer Stores Transit Depot

opened on 18th July. At this time 4 Corps Troops Engineers had under command 24 Company and two Artisan Works Companies. In September work was in progress on the road to a hospital at MS124 on that road and orders were given for seven miles of road for a lorry convoy dispersal and marshalling area there.

In October 1943, a party from 305 Company started an engineer park at the rice mill half a mile along the Imphal-Yaingangpopki road for 4 Corps Troops Engineers, CRE 457 FAE, and local field companies. In November, construction began of a camp for a RIASC GPT Company. During a visit by the CE (Ops), there was a short ceremony for a jawan who had saved a British soldier from drowning in the Brahmaputra River.

Early in 1943, work was started on a petrol storage and delivery point at MS122 on the Dimapur-Imphal road, and for a general hospital at Kanglatongbi. Work also began for an Advanced Base Ammunition Depot by the cutting of nearly two miles of roads in virgin jungle.

Boat Design and Construction

In June 1942, the CRE of 23 Div, Lt Col NEV Patterson, decided that in this theatre, some form of additional water transport was required, as there were neither Folding Boat Equipment (FBE) nor any other suitable boats available. A field company was detailed to design and build a general-purpose boat for carrying troops. Also a field park company was detailed to design a boat for carrying stores, and the lot fell to 305 Company (then under Maj MH Briggs). The 2IC, Lt WG Prow, designed a small rectangular pontoon-like craft 12ft 6in in length, with a square stern and inclined bow. Known as the PN boat, it was capable of carrying $\frac{3}{4}$ ton of stores when fully loaded, allowing 6 inches of freeboard. It was made of timber planks, sawn from tree trunks by local labour employed by the company. 305 Company tradesmen, who also carried out the boat building, made fastenings and metal fittings (see Appendix E). 91 (RB) Field Company (OC Maj JRG Finch) was also involved in the boat building (see Appendix C). Although ravaged by malaria, and 35 men under strength, the company also managed to build a number of boats with the employment of local tradesmen. Production reached one boat per day. Boats were taken for trials on Waithou lake, near Imphal, where they were inspected by the CinC, General Wavell, on 11th October 1942.

The PN boat was a success and it was decided to use it to form the basis of a pontoon bridge. No floating bridge equipment was then available in India, and it was not known when any would be received. Four PN boats were connected together to form a pontoon and transoms, spreader beams and decking were designed to complete the superstructure. All the timber for the first bridge was obtained locally, and sawn into beams and planks, whilst metal fittings were made by 305 Company blacksmiths. The finished bridge was successfully tested at Imphal. It was decided to build 1800 feet of PN boat bridge, sufficient to

cross the Chindwin at Sittaung with 50% spares. This would require 500 PN boats and a large quantity of timber superstructure. The building of the PN boats was carried out in Imphal and completed as planned in time to be available for a possible crossing of the Chindwin in 1943, but in the event it was not so used. Many of the boats were built by civilian labour in the villages, the work being co-ordinated by 305 Company. The timber superstructure and decking was ordered from India.

In the event the PN boat bridge was used on the Manipur River on the Tiddim road before the Bailey Bridge was built in 1944. In January 1944 120 PN boats were moved from the Palace pond at Imphal to Chittagong.

As a result of the interest shown in the PN boat among visiting officers, a larger boat was designed by HQ Eastern Army to carry 30 tons of cargo and to be used in ferrying stores and equipment down the Chindwin. This craft was known as the EA Boat. Many of the components were prefabricated in India and a special boat building company was raised to assemble boats in Burma.

Roads and tracks forward from Imphal

Before the Japanese invasion of Burma; there was no road from Burma into Assam. The Burma PWD had built a 9 feet wide metalled road from Kalewa on the Chindwin river through the Myittha gorge to Kalemmyo in the Kabaw valley. Beyond that northwards a 76 miles long road to Tamu had been surveyed, but the construction work had not been carried out. Hence the withdrawing troops, and the refugees, had to make use of the bullock tracks connecting villages in their endeavour to reach safety in Assam.

In 1942, a main task of the engineer units of 4 Corps was the improvement of the existing roads in Assam. These had to be kept open, widened and gradually improved to all weather standard. Such roads as there were and the bridges along them could not bear the weight of artillery and its vehicles. During the monsoon there were continual blockages through landslips and due to the roads becoming impassable with mud. Hundreds of culverts had to be built, apart from many minor bridges and a number of major ones. All the bridges being repaired or built had to be improvised, as there was then almost no standard bridging equipment available. When bridges were inadequate for the vehicles to cross them, and a ford was not possible, improvised rafting had to be employed and the troops soon learnt to swim and began to master wattermanship techniques - aided by sapper guidance and training courses which were run on lake Waithou, near Imphal. Road making was not confined to sappers. 17 Div had to put many of its troops on road making work - such was the need for roads to be made or improved and the shortage of sappers to do such work. For example, a road from Bishenpur westwards along the line of a bridle path to Lakhipur towards Silchar and its railway station was undertaken by 82 Anti Tank Regiment, until the task was taken over by sappers in January 1943.

In 1942/43 a good two-way road was rebuilt covering the 175 miles from Dimapur to Pael via Kohima and Imphal. Beyond that there was a "fair weather" track, through the hills, which had been made in great haste at the time of the evacuation from Burma in early 1942. An engineering task of the first magnitude was the cutting and making not only of a road across the Kabaw Valley and through the hills to Sittaung on the river Chindwin, and also of 100 miles of two-way "all weather" road for 30-ton loads to replace the existing track to Kalewa on the Chindwin. The latter ran through the hills from Pael, via Tamu, along the Kabaw valley, to Kyigon and Kalewa. The task was given to the GREF, which had been provided with plenty of machinery. Some 10 miles of this road had been accomplished by the Spring of 1944.

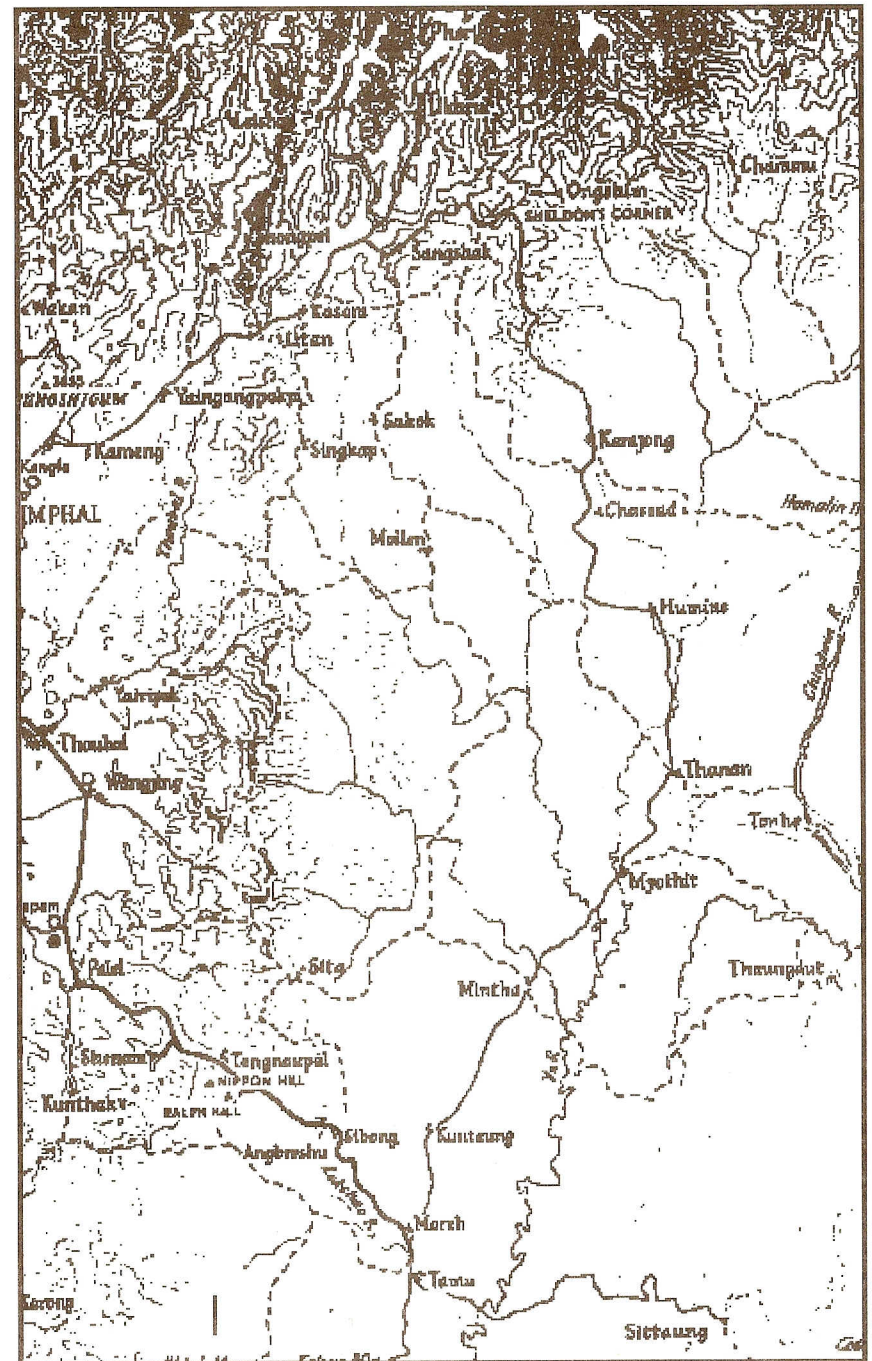
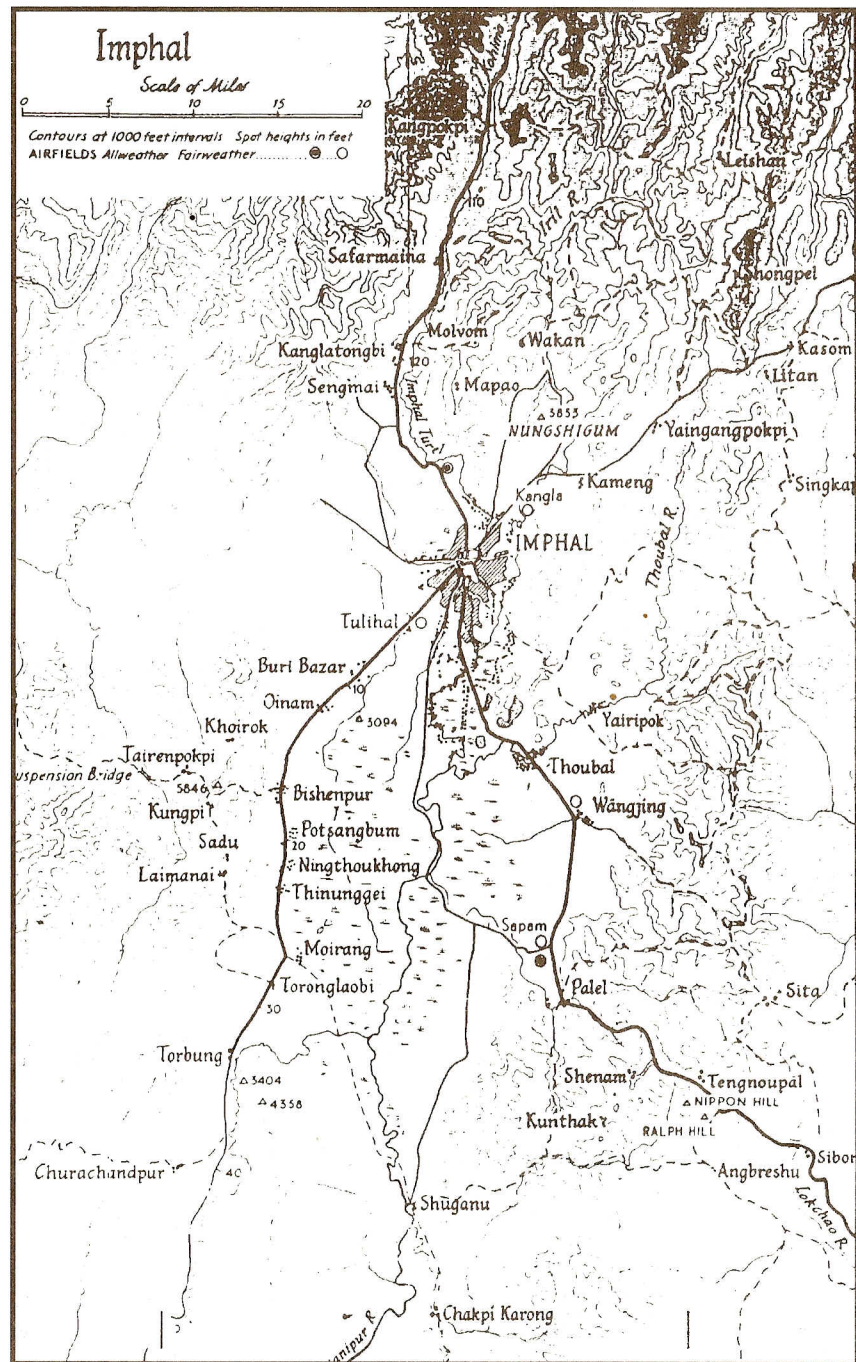
Tiddim Road

The first major construction task ordered in 1942 was the 165 miles long road, which was required south from Imphal to Tiddim. The first 40 miles of this route via Bishenpur were fairly level and passable for jeeps in all weathers and for lorries except in heavy rains. Thence the route became an extremely difficult track suitable for jeeps only in good weather, but not as far as the crossing of the Manipur river at MS126. There were many defiles through which all the supplies had to pass. This route crossed hills up to 7,000 feet, traversed slopes of 70°, plunged down some 1,800 feet to the river and up again 2,000 feet to Tiddim. However much of the effort was to be switched to the Tamu road early in 1943. There were insufficient engineer resources to do both roads. At that time the road was open to lorry traffic as far as MS126, beyond which there was only a poor jeep track onwards to Tiddim. It had to be made into a road to Fort White, Kalemmyo in the Kabaw valley, and to Kalewa on the Chindwin river.

Most of the road had to be hacked through dense jungle; many streams had to be bridged or culverted, and these could suddenly be in spate in the wet season, and the road washed away. In the monsoon the whole country would be subject to extremely heavy rain and dense mist. An appreciation by 4 Corps showed that forty Hamilton 140 feet bridges or their equivalent were needed together with 3000 feet of stock spans.

305 Company was at this time part of 23 Div, and had been in the Imphal area from May 1942. The War Diary of the company, in September 1942, mentions its delivery of stores to Bishenpur, some 18 miles south of Imphal in October 1942; however, the greater part of its work was on the Tamu road.

The June 1943 monsoon caused considerable difficulty. For a time the bridge over the Manipur river was unusable, the rain-softened earth became such that the operation of bulldozers was very difficult, and there were numerous landslips to be dealt with.



In October 1943, 24 (RB) Field Company under CRE 4 Corps Troops was ordered to MS111 and found that from MS100 to MS107, where the road crossed the Manipur river, it was fit only for jeep convoys. The company task was to supervise work from MS102 to 122, including the completion of a 40ft bridge at MS113 and the construction of another at MS117 to replace an existing timber structure. This task was shortly handed over to No 8 Engineer Battalion (Sikh) and the company was to concentrate on the construction of bridges, blasting, and marking out the extent of the cut to be made by bulldozers. At MS117 a temporary causeway to take traffic had to be made before dismantling an existing bridge could start. The valley through which the road passed from MS109-110 was to be developed as base depot. The OC, Maj Hill was engaged in marking out roads, causeways across streams, turn rounds and water points in this area; bulldozers and labour from 8 Engineer Battalion were engaged to put this into effect. At this time, a party from moved from Leimatak on the Bishenpur-Silchar road with the material for a jeep raft on the Irang River. 15 (RB) Bridging Section delivered many PN boats to Tiddim Road.

At the beginning of December 1943, 24 Company had No.1 section still at Digboi, No 2 blasting three rock faces between MS111 and 112, No 3 Sec preparing abutments and pier at MS117 and blasting rock faces at MS113, whilst the HQ Section was working on a water point at MS 109/6. They received the EinC UK (Maj Gen King), Chief Engineer SEAC (Maj Gen Horison), CE 11 Army (Brig Greenwood) and CE 4 Corps (Brig H Williams). Maj Hill was promoted and posted elsewhere, and Capt Rusted became OC. December 25 was a rest day and the road between MS109-127 was opened to 3 ton traffic by day and night. Early in 1944, the company had some men working on EA boats, training, and on jungle timber culverts at MS109-110; others were constructing a 40ft span bridge at MS117. The officers were introduced to General Sir George Gifford (11th Army Commander) by Brig Williams. Company Sub Hari Bhau left on transfer to Group HQ, after three years service with the company, and Sub Baburao Shinde took over.

Early in January 1944, a party from 305 Company went from Lumlong (near Imphal) to MS158 to take over three D4 tractors from 864 EM Company to work under 70 (Bengal) Field Company of 17 Div. The Bailey bridge at MS127 was opened on 21st January.

When the Japanese advance began in March 1944, a convoy was mortared at MS107, and seven 15cwt trucks were damaged. 24 Company found enemy patrols on a ridge above the company's position, presumably with the intention to draw our fire which was successful as the troops had not yet realised the importance of fire control. In the night of March 15/16, there was heavy rain and visibility was nil. Enemy patrols were active. Due to the lack of wire, the enemy was able to infiltrate between defended areas and in a number of cases reached the depot area, but withdrew before dawn. The next day a successful air

drop of ammunition was received. The CRE ordered withdrawal, first to MS35 and then to move to Imphal and come under orders of CRE 4 Corps Troops Engineers. On March 31 the Company was ordered to proceed to the Silchar-Bishenpur track where their task was the blasting of rock to enable a ME Company to improve the track to take 15 cwt trucks.

Tamu Road via Palel

Early in 1942, there was a road of sorts from Imphal 75 miles across the Naga hills to Tamu, although much of it was only an earth track. In May 1942 several bridges were in course of fabrication at Imphal for the Imphal-Palel road when Japanese bombing stopped the work. The air raid caused heavy loss of life and extensive damage to the electricity and water supply installations. A second raid caused yet more damage. Sappers restored the water and electricity supply in the absence of PWD employees who had vanished. Then 23 Div arrived and they took over the road from MS29 forward towards Tamu. The monsoon had broken and conditions on the road were very difficult with a number of landslips and bridges washed away.

In one night the Thoubal river rose 15 feet and washed away one pier of a 192ft Class 12 bridge which was under construction at MS18. No bridging equipment being available at that time, 305 Company (OC Maj Briggs) had the task of the design, and fabrication of the material, for a 64ft span where the lost pier had been. Steel which was found in the PWD depot and from demolishing bombed buildings at Imphal was fabricated into a through girder bridge. The two main Warren girders had 12in x 5in RSJ top and bottom chords, with bracings consisting of pairs of 6in x 3in x in angles battened together. The top chord had the web of the 12in x 5in horizontal, so that the angle bracings could be bolted direct to the flanges, so avoiding gusset plates. Because of a landslide on the Dimapur-Imphal road, the company's heavy transport and workshop lorries were still at Dimapur. So all cutting and notching was done by hand with hacksaws and all joints had to be bolted, a task taking three weeks. Holes had to be drilled using a hand ratchet and post, with the few gusset plates required being cut from 1inch plate by hammer and chisel.

The bridge framework was fabricated in just less than four weeks, working two 12 hour shifts day and night, and trial erected and test loaded outside the workshops in Imphal. It was erected on site by the Tehri-Garhwal Company and a section from 305 Company. This was accomplished by the use of two timber trestles with suspension cables to support the bridge structure while it was assembled over the gap. On completion there was a ceremonial opening by the GOC when a 10-ton steamroller was driven across as a test load. The whole operation had taken less than five weeks from concept to opening, an achievement for a company formed only seven months earlier from new recruits, demonstrating the great qualities of ingenuity, skill and determination of the Indian Army sappers.

In October 1942, to facilitate the advance of 49 Brigade, a recce was made by the CRE and the OC of 91 (RB) Field Company, of the remains of the Shenam - Tamu road as far as the Lokchao river crossing where later a five-bay Inglis bridge was to be erected to replace the one which had been removed some five months earlier. Shortly afterwards, a section moved to Wangjing to prepare a campsite for 37th Brigade. Further works continued early in 1943, in the Moreh area, with the use of "Elephant Bill's" herd. At this time 305 Company was delivering stores to other Engineer units, and the company took over the water point at Wangjing from 91 Company. By March 1943, the road from Palel to Tamu opened, and 91 Company had all its sections at Witok, south of Tamu, clearing the track of a second carriageway from Tamu to Sunle, six miles south of Witok, in the Kabaw valley.

In April 1943, 305 Company moved back to be based at Imphal, although they also carried out a recce of a road from Palel to Chapki Karong. Although there were sporadic air raids by the Japanese, little serious damage appears to have been done. At this time, 24 Company was ordered by the CRE of 4 Corps Troops to construct a 160ft triple truss/double storey Bailey bridge across the Ding river at MS14 to be open within five days. This was the first 160ft such Bailey bridge to be built in India. They then worked to upgrade the drains, culverts and water supply on this road, and to operate a stone crushing plant. To increase the output a light railway was built to bring rock to the plant. 305 Company were also at work on repairing culverts on the Shuganu-Chapki Karong road. The monsoon arrived and transport to Chapki Karong required chains and manhandling of stores across inadequate bridges. They collected parts of some American civilian vehicles from Dimapur to make jeep trailers. They found conditions on the road forward of Shenam difficult with ruts up to axle depth, but the supplies continued to be delivered.

In June 1943, 24 Company had the assistance of ten lorries and 21 men from 15 Bridging Section. At this time parties of 91 Company had reached the Chindwin river; one under Sub Amar Singh was viewing the Chindwin from the Tonhe side, and Sub Narayanao Hande was soon viewing the river from the Sittaung side. A party had completed the improvement of the muleable track from Thanan to Tonhe, and another was building a suspension bridge at Lokchao. In May a party completed the concreting of abutments at Moreh where they then erected a 120ft Bailey bridge.

By June the rains had come, yet output of the stone crushing plant was raised by 24 Company to 14 tons per hour. It required 100 tons to make 200 feet of road. In a month they upgraded 3,900 yards of road with 2,100 tons of stone. Their problems were increased by having 20-30% of their strength in hospital with recurrence of malaria. At this time the company put in a water supply further south at Shenam which was then handed over to Lt Sheldon of 91 Company. The latter company's problems were then resulting from the monsoon rains, which resulted in the Yu river bridge being closed, although the flying bridge remained open. The bridge over the Lokchao river at Hesin was also

closed, and because the river changed its course, the flying ferry had to be resited downstream. The RAF also created problems by twice attacking parties of 91 Company, at Hesin, 5 miles south-east of Tamu, where the ferry was sunk and at the Yu crossing where a bridge cable was cut; fortunately there were no casualties. Most of the company were withdrawn to Thoubal for training and the OC, Maj Finch, went to Quetta Staff College, being replaced by Maj AP Lavies. An outbreak of cholera in a detachment of the company resulted in a period of quarantine, and one death. During August, the Company had sections at Wangjing, Sibong hill (several miles NW of Moreh), and at Shenam.

An easing of the manpower shortage occurred in July 1943 with the arrival at Palel of 500 reinforcements for the engineer units on the Tamu road, but problems for 24 Company continued. In July one of their 10 ton Aveling road rollers went some 50-70 feet down into the khud. In spite of great courage shown by LNK Wasawa Singh, for which he was Mentioned in Despatches, in driving the roller until it foundered in waterlogged earth, the roller was not recovered for 10 days. Then another roller suffered the same fate, but was recovered in four days. The Army Commander, Corps Commander and the CRE all visited the site. At this point Maj Darley went to the Staff College and Capt JFW Rusted became acting OC. Works continued for another month, with the fall of a roller into the khud again, when the works from MS29-30/3 were handed over to the CRE 114 Wks Bn. Maj FM Hill arrived as OC and shortly was off on a recce on the Tiddim road. A further section of the road was handed over to CRE 107 Wks Bn, and the stone crusher plant to 457 FAE.

In July, Maj WG Prow, of 305 Company, went to reconnoitre the suspension bridge four miles forward of Chapki Karong on the Mombi track, where the ford had been flooded to a depth of three feet for three days, with a flow of 8 mph. The bridge was found to be repairable but the task would take about 20 days and 190ft of $\frac{3}{4}$ in steel wire rope was required. The company sent parties to repair the suspension bridge, and to Shuganu to complete the shingling of the road to Chapki Karong. In August, 15 Bridging Section transported 16 girders of 32ft stock span bridging from Dimapur to Kakching, 20 miles down the Tamu road from Imphal.

After a month of road and bridge repairs in August, most of 91 Company handed over their responsibilities on the Tamu road to 422 (Madras) Field Company, and moved to Shuganu, some 30 miles west of Moreh, to build camp roads for 37 Brigade; they also became responsible for the Kakching-Shuganu road and the track further south to Chapki Karong. These works continued into 1944, and when the rains came at the end of January, the works included the cutting back of trees along the road to allow the sun to dry out the road; the opportunity was also taken to get in some training.

In October 1943 a party of 305 Company were at MS17½ constructing a stock span bridge whilst a British NCO and 24 IORs went to Dimapur with the pleasant task of drawing new vehicles. During an air raid on Palel airfield, two of

the company's vehicles were damaged. The company also dismantled a culvert-bending machine at Palel ESD and rebuilt it at Tamu. The company took over the Engineer Stores Park for all 4 Corps Troops and airfield construction units in the area.

In November 15 Bridging Section were employed in moving FBE stores to a site on the Yu river for erection by 422 Company. The whole unit was then busy checking over the Eastern Army PN boats and equipment for despatch down the Tiddim road (19 vehicle loads).

9 (RB) Bridging Section had arrived from Ranchi at the end of December 1943. They were an all-PM unit of approximately 85 all ranks, under Capt PM Pilditch and Sub Baqar Khan, and set up camp at Kakching near Palel. Renewing their old association with 20 Div engineers, they sent forward a detachment with assault boats and outboard motors to the ESD at Moreh, where they had to extend the barbed wire perimeter fence by another half mile. They also provided instructors to 481 and 92 Field Companies for OBM (outboard motor) training.

Operations with 20 Division in the Kabaw Valley

When 20 Div took over the Chindwin front from 23 Div in late 1943, they adopted a forward policy of aggressive patrolling, calling for additional tracks and roads to support brigades operating on a mule basis in the thick jungle towards the Chindwin.

481 (RB) Field Company (Maj MI Prichard) arrived in November and was first put to work on the Tamu-Sittaung road, from MS8 to MS16, to up-grade it to 18ft fair weather standard, calling for six timber trestle Class 18 bridges of 50 - 70 foot spans. The next month they were switched south to support operations developing on the Yu river, where the Japanese had strong positions in the Kyaukchaw area. Starting from Hlezeik, 8 miles south of Tamu, they began upgrading. The next month they were switched south to support operations developing on the Yu river, where the Japanese had strong positions in the Kyaukchaw. the mule-track leading south east to Aukchaung, and thence through the hilly and thick jungle to Telaung, where the ground rises 1500 feet in less than a mile. Heavy rain delayed the opening of the track and 100 Brigade's attack on Kyaukchaw was called off when the brigade was switched further south.

In December the company started work on the routes leading south from Hlezeik. First, to make a rough 15cwt road through Kameik to the Namunta Chaung bridge on the right, and then in January to build a fair-weather 3-ton road from Kameik to Maw, some seven miles south on the Yu river. There were six timber bridges - three were 50 foot long on the Elephant bridge principle, three were 70 foot timber trestle, class 18 and 14 feet high. (Later in the campaign, the company were gratified to learn that these had carried the class 30 Lee tanks of 3 DG.) Following this, in February 1944, attention shifted to the west where a 15cwt fair weather improvement was needed from Witok, on the main Kabaw alignment, to Khengoi,

2600 feet up in the hills 18 miles away in the direction of the Mombi track. 90% of the road was in side-cut but, with 2 bulldozers, the task was completed in 26 days, earning the personal congratulations of General Gracey.

92 (RB) Field Company (Maj ACLewis), also in 20 Div, had arrived in early December 1943 and was deployed on the Tamu - Sittaung road from MS16 to MS22, working ahead of 481 Company to make the 15cwt road previously mentioned. They also constructed some concrete water tanks for infantry units and felled some large trees for the artillery. Next month they moved to work on the main Kabaw alignment from Tamu towards Minthami, 25 miles to the south, and came under command of 32 Brigade.

The Kyaukchaw battle. At this time, 32 Brigade was approaching the Japanese positions at Kyaukchaw on the Yu river, and the track which 481 Company had started from Hlezeik assumed new importance. Roadhead was at Aukchaung, where 92 Company established their base, known as Carlisle Camp. No 3 section, on a mule basis, moved forward on to the very difficult stretch to Telaung, 7 miles ahead, where there was a ford over the Yu. They established an alignment by careful siting and use of favourable spurs and re-entrants and started work on 3rd February using explosives to blast the rocky defiles, and aid tree clearance. Behind them came No 2 section with 1376 Indian Pioneer Company under command to prepare the road formation and complete the bridges. Beyond Telaung, an extremely difficult path followed the south bank of the river toward Kyaukchaw, 4 miles away, where No 1 section was with 1 Northants (of 32 Brigade) in their approach march.

It was soon realised that the river at Telaung would have to be bridged, particularly when it was found that mules carrying loads or stretcher-cases could not be persuaded to swim. The problem was how to get the bridging to Telaung, because the un-completed overland track was unsuitable for bridge vehicles, so 9 Bridging Section (Capt Pilditch) was called in from Moreh to raft the equipment down river from an unloading point at Hlezeik.

The 28 mile journey proved more hazardous than expected owing to the unpredictable current, and many rapids where it was found necessary to disembark all personnel and warp the boats separately with lines from the riverbank. The war diary has an interesting mention that "2½ inch hemp cordage is not strong enough to hold a loaded FBE boat in a 10 knot current". Several boats were damaged, particularly those in worn condition previously taken over from 15 Bridging Section, and Sapper Fariq Mohd earned high praise for ingenious repairs using patches contrived from salvaged materials. The river journey had taken four days but by 20th February a 140 feet FBE bridge was in position at Telaung, and some boats with outboard motors were taking supplies down to the Northants, to supplement the jeep track being pushed down on the south bank of the river.

A very considerable battle had been fought at Kyaukchaw during the month. An early assault involving No 1 Section of 92 Company in scaling some cliffs, and using Bangalore torpedoes had been unsuccessful, and the Bridging Section found themselves reluctantly responsible for ferrying supplies to an infantry post downstream, prompting Pilditch in the war diary to vow "never again to get involved in this sort of Carter Paterson business". Casualties were evacuated upstream to Telaung in GP boats crewed by 92 Company and, from Telaung to the rear, in native boats operated by Burmese personnel of a Yu Boating Company RIASC. During the action, the Northants mortar officer was awarded a posthumous VC. 92 Field Company at this time was commanded by Capt SR Holt, Maj Lewis having left on 6th January to go to Quetta, and Maj JH Clark, his replacement, not arriving from 28 Field Company until the end of February.

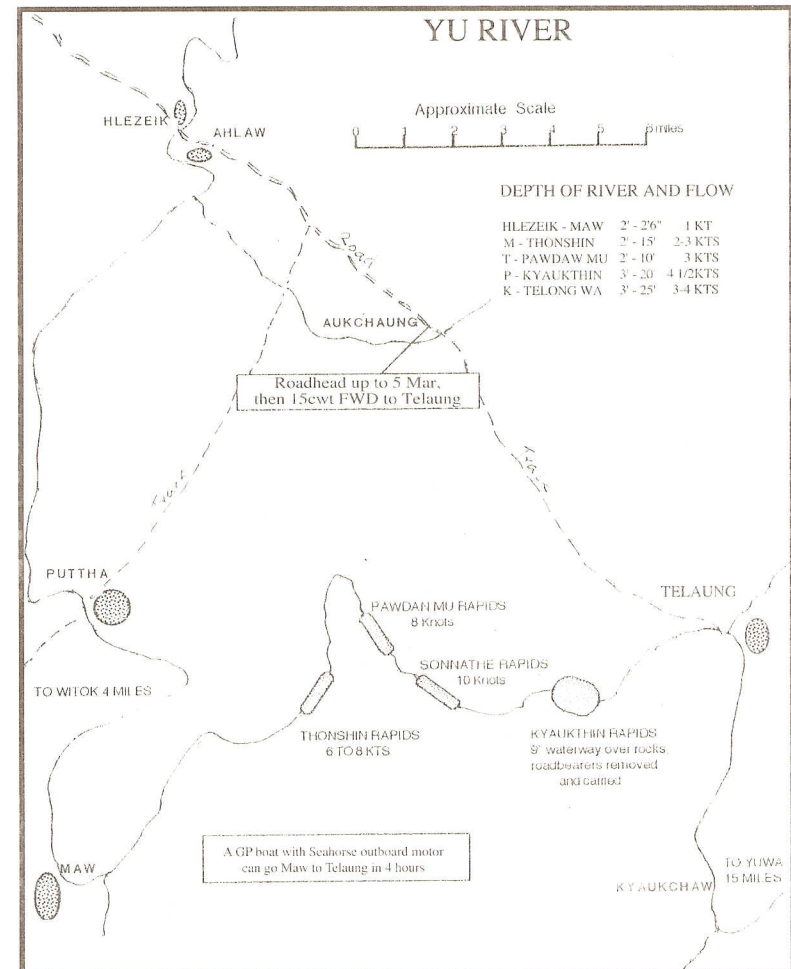
The Japanese began their advance in early March and the Division's forward positions had to be pulled back. It was left to Capt Holt to retrieve the FBE bridge, in some haste. By adapting some 10cwt and 15cwt trucks, all 7 bays, including the boats, were safely got away overland to Carlisle Camp. Maj Clark, meanwhile, had received orders to evacuate all the heavy equipment and prepare for booby trapping and demolitions in a withdrawal to the Shenam position.

Other units. Whilst these events were taking place, the field section of 305 Company had been put under 91 Company for duties on the Minthami road. 305 Company was delivering stores to 61, 71, and 91 Companies with a reported strength of 7 officers and 129 other ranks. Rain in February delayed work on the road for a time. In March they prefabricated and delivered to Tamu a piledriver for the first river Yu bridge, and later delivered three more. The field section under the CSM returned to the Company from the Engineer Stores Depot at Moreh.

91 Company moved north to Waithou, near Imphal, on 2nd March, where work began on the box position, but No 2 section was sent on the Tiddim road to act with infantry units, and No 3 Section was sent to MS2 on the Ukhrul road to build a 32 foot span bridge.

Tamu Road via Litan and Humine and Mintha

This route went north-east from Imphal through Yaingangpopki, Litan; 32 miles along, at the fork is Finch's corner where one branch turned north to Ukhrul and the other went on through Sangshak before it turned south at Sheldon's corner towards Humine, Myothit and Mintha in the Kabaw valley. 91 (RB) Field Company (OC Maj Finch and 2IC Capt Sheldon) had arrived at Imphal on 9th June 1942 and the construction and maintenance of the Imphal-Ukhrul road was passed to them. They began to repair roads and bridges in Imphal and in the Litan area towards Ukhrul north east of Imphal. A suspension bridge a mile beyond Litan was reconnoitred and found to be without side stays, and three wooden bridges, the piers of which were worm-eaten and rotten, although in use by carts and jeeps,



were in the last stages of decay. An alternative route beyond Litan northwards to Ukhrul was begun. Lt Newsome and 2Lt Gordon went on a recce from Sangshak across the hills south towards Palel, whilst the OC with the 2IC and a party went to work on the track towards Yaingangpopki, and to open an alternative route to Ukhrul. Work was then started on a further stretch to Litan. The OC with Lt Col O'Hearne of the RAMC travelled from Litan down the Thoubal river to near Yainganpopki in a canvas boat, the whole route was a series of gentle rapids which caused some damage to the boat on rocks, the journey finishing with the boat and party in a swamped condition. At this time a party from the company was preparing to accompany an infantry unit and to be moved by air to Fort Hertz. See Appendix D for the story of 2Lt Chambers.

The works were visited by the Chief Engineer, Eastern Army and at the end of October 1942, 91 Company handed over responsibility for all roads in Imphal-Litan-Shangshak - Ukhrul area to 70 (Madras) Field Company of 17 Div, although a section remained working on this road where the maximum gradients were 1 in 5 on this 13/14 feet wide road. In December, the OC, the CRE and the division commander, Maj Gen Savory, went by jeep to Sangshak and thence to Ukhrul where they received a great reception from the inhabitants; it was the first motor vehicle they had ever seen. The OC visited Moreh and arranged elephant transport for a road recce party to Humine. No 3 Section moved to Moreh to start work on the Moreh-Mintha-Humine track; with two platoons of the 3/10 GR as escort, 2 bulldozers, 1 grader, together with a camp of seven or eight elephants with Burmese drivers and an interpreter. They were employed in cutting timber and preparing bank seats for bridges, with the elephants for dragging timber and putting it over gaps. They had reached seven miles from Moreh by the end of 1942; they found the villagers to be very friendly.

Early in 1943, the OC of 91 Company, Maj Finch, and 2Lt Dawson made a recce for a jeep road from Sangshak to Humine at the head of the Kabaw valley, but found that continuation into Burma was impractical because of the steepness of the mountain face. A section worked on a staging camps at Tengenupal, whilst another, with a party of coolies and eight elephants worked on a bridge over the Taret river.

Field Defences and fighting as Infantry

In May 1943, some sappers of 91 Company accompanied patrols of 3/3 GR and 3/5 RGR over the Chindwin river, setting booby traps and ambushes. In June, a section went in support of 37 Brigade (23 Div) on the Tamu-Sittaung road, and later supported them in their withdrawal across the Yu river at Lokchao where the bridge was closed by flooding. PN, GP and Lundwins boats were used to ferry the troops across the river.

The Japanese had been digging complex underground bunkers which gave their troops great protection from fire and from which it had been most difficult to dislodge them. They were in effect pill boxes using natural materials. They

were built below ground where the water table allowed, otherwise up to six feet above the surface; the revetment was of logs and earth with a roof adequate to protect those inside from shellfire and bombing (see next page). In August 1943 a party from 305 Company commenced work on the demolition of specimen enemy bunkers at 4 Corps training area at Yaingangpopki.

In January 1944, 92 Company were with 20 Div in the Kabaw valley; their No 1 Section, under Lt RB Riddell, was attached to the 1st Northhamptons in an attack on a strongly held Japanese position on an 'island' site formed by the bifurcation of the river Yu, a tributary of the Chindwin, the island being about 30-40 feet above water level. The plan was for infantry and sappers to scale the almost vertical faces and blow the wire defences with Bangalore Torpedoes. This plan was unsuccessful and was superseded by surrounding the 'island', shelling by artillery, and later by aerial bombardment. During the action a folding boat bridge, which was the only one available in that part of the country, had been floated down river to assist the supplying of rations and ammunition. The Northhamptons' action was called off and 92 Company was ordered to recover the bridging equipment; this was difficult, as the company HQ was some 10-12 miles away by mule track over a range of hills at MS6 on the Sittaung road. The track had to be converted for vehicle use, and the vehicles available had to be converted to carry the bridging equipment, mainly by the Mahratta Section under Lt AP Cumming, who was on loan from HQ 20 Div Engrs. Both Lt Cumming and Jemadar Bhagwan Sakpal were Mentioned in Despatches.

In March 1944 No 2 Section of 91 Company were sent to 37 Brigade at MS82 on the Tiddim road and saw action with units of 3/3 and 3/10 GR, and with the West Yorkshire Regiment. They laid booby traps, dealt with unexploded grenades and later dealt with booby traps left by the enemy.

Also in March, the OC 305 Company was appointed OC Imphal 'B' Box at Lumlong Bazaar; his company was joined there by 903 Jeep Company RIASC; shortly afterwards they were moved to a site next to the ESD. The defences of Imphal were being strengthened and amongst those engaged was a section of 363 Company who were working on the Keep for 4 Corps HQ.

In mid-March, 481 Company prepared a defensive position at Namuntha Chaung. A Japanese thrust had been reported as coming north up the Kabaw valley from Yazaggayo. During this period various parties laid mines and prepared roadblocks in the area of Minthami. The company was almost completely in an infantry role in the Kabaw valley. They supplied escorts for tanks. Personnel of the unit were acting as escort at the first tank battle in 4 Corps area. Four Japanese tanks were knocked out and one was captured. The company then acted in an infantry role as part of the Shenam garrison. The events from March are recorded in 'Defence of Imphal' Chapter 18.

APPENDICES

Appendix A

402 (RB) Field Company Operations July 1943 to March 1944 by Maj WF Faulds IE (extract from a September 1942 to January 1946 account)**Palel - Imphal**

We proceeded on up to Imphal where the company received orders to go to Palel to construct an airfield, much to the annoyance of the CO, Brian Downward, who felt that this work should have been entrusted to a pioneer battalion. In disgust, he appointed me, as yet an ex-architectural student, to be IC works and to proceed with the design and construction of the airfield, while he concentrated on ensuring that the rest of the company were fully trained in jungle warfare.

The site chosen for the airfield was a low-lying piece of land sloping towards a small swampy stream feeding into a nearby river. It was directly at the foothills of the mountains separating the Manipur plain from Burma and to the side of the road connecting Palel to Tamu.

When I arrived to inspect the site I found one staff sergeant RE and about 2000 Manipuri women who were armed with baskets and kodalies, digging into a rising bank of ground and dumping the surplus soil to the side. There were no plans, no survey had been carried out and no attempt had been made to establish requirements. The staff sergeant had been ordered to level the ground as far as he could go and that was what he was doing. He knew nothing of flying gaps, sight lines, gradient changes, runway lengths or differing aircraft requirements. A British mechanical engineering section was on hand to help but only had two pieces of equipment, an American Auto Patrol which was bogged down over its axles in a swamp and a dragline/excavator in the nearby river bed used occasionally for obtaining gravel.

Whilst the company under the OC went off to learn and practise jungle warfare, I attended on the DCRE at Corps HQ to undergo a rapid course on airfield construction. Armed with an appropriate army handbook I returned to Palel to survey and plan the field. After much learning of the problems of soil stabilisation, earth formation and grading, a runway was gradually constructed. Used, before it was completed, by an American Vulcan aircraft which had to land in an emergency, it sank to its wheel hubs as it came to a stop causing much head scratching and doubts as to whether we had got our act together and questions asked as to what would happen when it rained.

By this time however the Palel strip had become important enough to engage even the CO's attention and when we were ordered to turn it into an all weather runway, the engineering problems not only mushroomed but brought the best of

the improvisation measures from the whole company. The CO was replaced by Maj MacLaurin and specific tasks were set each platoon such as quarry working, operating tar boilers and laying, grading and tarring the surface. Road rollers had to be brought up from Dimapur, many of which could only tackle the up gradients on that journey backwards.

By the September of 1943, Palel was nearly finished and our expertise in the design of airfields was rewarded in our being asked to construct a further landing strip at Wangjing half-way back towards Imphal. By then we had help and a proper mechanical section or scrapers was made available to prepare the form work. We were then given the task of covering the graded formation with "Bithess" - a form of bitumen coated hessian which when passed through a bath of petrol became very tacky and overlaid over another sheet stuck together combining into a weatherproof surface. It worked well in small areas but control of the long lengths of the hessian demanded a very high standard of quality control. The system was very wasteful and considering the difficulties of getting petrol supplies up from India it was a decided engineering gamble. My platoon then, the Sikhs, solved the jointing problems by lighting those sections, which did not stick properly, virtually welding the layers together. It was not a safe method and later resulted in the destruction of an aircraft by others doing maintenance on a similar field when the joint caught fire and ran up the length of a roll leading into an aircraft pen and setting fire to the aviation fuel.

402 Company was now working directly under a CRE, Lt Col Clayton (of 457 FAE), who was formulating the idea of a Forward Airfield Engineering Force to provide immediate location of suitable sites for airfields, so that not only could air communications be maintained with forward formations, brigades and divisions, but air fighter cover could be brought forward much earlier.

The CRE was insistent that we should try and camouflage the Palel runway by sticking pieces of pineapple skin in chunks on the runway tarmac. We tried experiments and went through tons of pineapples, our mess having to eat as much of the insides as possible. I have never been able to look a pineapple in the face since.

Tamu

My design work at Wangjing now complete, I was sent down to Tamu in Burma with my platoon of Sikhs to create an airfield suitable for communication purposes and the use of light aircraft ambulances. The site chosen was an area of paddy field some five miles south of Tamu and only fifteen miles from the Chindwin river. The field was surrounded by tall teak trees, some up to 200 feet in height, with such girth that would make them difficult to fell by explosives.

My task was to create a runway big enough to take a DC3 by levelling off the paddy bunds and to clear flying gaps at each end of the runways to allow the

planes to land on a strip of minimal length. To help in this task I was allocated a number of Elephant Bill's elephants to drag the felled trees from the runway. Bill Williams had his camp some three miles from the strip. The felling of the trees themselves was quite a task especially those giants with a width of between 4-5 feet and a girth of up to 15 feet. It was not easy to cut them with explosives and to use axes demanded a team with a blacksmith and forge in support just sharpening the axes.

1944 - January to March

In January 1944 I was told that I was to play host to a section of American airborne engineers who wished to have a taste of the jungle and an idea of the type of work involved. I was to learn later that they were to be used in the second Wingate operation flying in gliders. They duly arrived in a DC3, had to be helped not only to deplane but to make camp and persuaded that that they must stand to, both at dusk and dawn and maintain watches against signs of enemy movement. They were more interested in seeing, shooting or capturing wild animals and their day was made when they reported to me one morning that they had captured an elephant which had wandered into their camp during the night. It stood docilely by a tree whilst one of their intrepid soldiers chained it up. They were taken aback when I pointed out that this was one of Elephant Bill's herd. The sad part of this story was that having introduced their captain to Elephant Bill as a result of their capture, he was killed in a jeep accident returning from a heavy drinking session.

The American visit was an eye-opener for me as to the way they approached their soldiering. Their rations were pre-packed and fancy. Among their tools and weapons they carried a couple of small bulldozers, about a D 1½, and every man had an automatic carbine. However in a competition, I set up between them and my Sikhs, we beat them hands down in breaking up paddy bunds using a Pearly punch and explosives against their use of the tiny bulldozers. In terms of shooting we came out about even.

The Americans were with me for about 10 days but were sent back to Ranchi as the news of the Japanese build up on the Chindwin came through and the preparations for us to move back to Moreh took priority.

Appendix B

24 (RB) Field Company Bridge near Digboi

In November 1942, the Company moved to a site near Digboi to build a Hamilton bridge for the CRE 111 Works Battalion on a very restricted site five miles east of Ledo. The following description of this task is a precis of the company War Diary for the winter 1942/3.

On 2nd December, work started on the piers but after a week, there was a change of plan and the bridge was to have one span of 140ft and two of 100ft. By 22nd December, one pier had been concreted and work began on the abutments. The work proceeded slowly as the excavation had to be 15ft deep and below water level.

By January 2nd, the abutment foundations were completed – 350 cubic yards on the right bank and 500 cubic yards on the left bank. The United States Army provided two cement mixers. Some 80 tons of concrete were poured in the two abutments. An aerial ropeway was erected to facilitate the works. The work continued for three weeks when the assembly of the bridge, and the rain, began. By the end of January, the river was dangerously high.

February 2nd saw the excavation of No 3 pier proceeding 24 hours per day, using four parties of twelve men in each. Water was being pumped out of the caisson at the rate of 8,000 gallons/hour. The rain stopped. Preparatory lifting on jacks of 70 tons of bridge began when orders were received for the company to move elsewhere. After some discussions at high level, two sections were ordered to remain to complete the bridge.

Excavation of No 1 pier continued. The first efforts to sink the caisson which weighed 50 tons failed. The pumps were stopped and it was found that the caisson, which rapidly filled with water, was 3in out of true. A 2 ounce charge of gelignite placed in the water gave no result, nor did a 21 ounce charge. However a 3 ounce charge was "highly successful" and the caisson sank 9in. Such was the arduousness of the work that extra rations for the men were arranged. Work continued on lifting the bridge, although one jack failed, and on raising the abutments and piers with brickwork. By the end of February the bridge was 15ft above water level, and by 4th March it was 27ft 6in above the bed of the river. The bridge was set in position and the jacks were removed on 7th March.

Next day decking started but some 11 days later, some racking bolts were still awaited. American labour and machines were by then working on the approach road. On 23rd March, the first vehicle was winched up the ramp and following vehicles were hauled across by each preceding one. The next day, the first large convoy crossed, but the ramp was too steep. Those men of the company on site were then ordered to Imphal.

Quite a number of senior officers visited the site including: The EinC India, the Army Commander, the Area Commander, the Brigade Commander, Colonel IIP Cavendish, the Commandant RBS&M, CRE 111 Works Battalion, a representative of the RAF, and Maj Gen Wheeler and Col Arrowsmith from American HQ.

Appendix C

91 (RB) Field Company September 1942 to September 1943

The following account of 91 (RB) Field Company has been compiled from the memories of Lt Col WL Sheldon and the diaries of the late Maj GB Dawson who were in the Company at that time.

In September 1942 91 Company was billeted in a Manipuri village on the north-eastern outskirts of Imphal, the capital of the hill state of Manipur lying in the Naga Hills between Assam and Burma. The Imphal Plain itself is at an altitude of 3000 feet and is surrounded by dense jungle-clad mountains rising to over 7000 feet in places and forming the eastern extremity of the Himalayan range. The company was attached to 71 Gurkha Brigade of the 23 Ind Div, the Fighting Cock division, which together with 17 Gurkha Div, the Black Cat division on its right southern flank formed the central front bulwark between the Japanese in Burma and the plains of India.

At this time the company strength was much depleted from casualties nearly all of which were due to malaria. This was not only rife in the Kabaw Valley, through which the British forces had retreated from Burma earlier in the year, but also in Manipur Road which was the railhead in Assam through which all supplies and reinforcements from India reached Manipur. So acute was this manpower shortage that Sheldon remembers on arrival in the Company in September 1942 his PM platoon was able to muster just eighteen men on parade out of an establishment of sixty-five. The only tasks the company was engaged upon at this time were manning a water point for 71 Brigade and supervising the manufacture of "country" boats by local Manipuri craftsmen, which were to be used for recrossing the Chindwin on the return to Burma - a morale boosting rather than realistic project at that time.

The manpower situation was restored by massive reinforcements from Kirkee during October aided by the introduction of the foul tasting anti-malarial drug mepacrine, following which it was a 'crime' to get ill with malaria! The company activities were then for several weeks mostly taken up with training. Shortly after the arrival of the reinforcements a batch of mules were issued to the company and these were given to Sheldon's PM Platoon to try out. Presumably because at that time the PMs were furthest removed from company headquarters. Sheldon takes up the story of his first encounter with these infuriating, yet at the same time curiously endearing, creatures when they arrived at his training camp.

"One day at the latter end of 1942 I was detached with my PM Platoon in a remote place with the unlikely name of Yaingangpokpi some 20 miles east from Imphal on the road to Ukhrul in the Naga hills. I had been sent out to lick my platoon into shape having just received 60% reinforcements to replace casualties from malaria incurred before the advent of the anti malarial drug mepacrine. A

brief message arrived from company HQ which simply said 'prepare to receive mules'. It somehow smacked of the precursor to some form of grace - 'for what you are about to receive'. Now I knew what a mule looked like and that it was an unnatural mix up between a horse and a donkey but apart from that - nothing. I cannot now remember exactly how they arrived but I returned to my camp one day and there they were, absurdly long ears stuck out at right angles to their faces, which only mules and donkeys seem to have, and tails whisking away a myriad of inquisitive flies. Accompanying the animals was a stack of kit which it seemed I was also to receive.

"I was somewhat relieved to see my OC was also present. An experienced pre-war warrior, and to me therefore like unto God, he would surely be able to introduce me to these strange beasts and tell me what to do. The introduction rather took the form of: 'this is the front and that is the back and this kit you stick on the top and by the way you have to be able to get them into the back of 30cwt trucks'. To my tentative query as to who was going to look after them he replied, 'well as you are giving up your vehicles the MT drivers can do it - good luck'. With that and a wave he got into his vehicle and drove away. Whilst I was greatly flattered by his confidence in me it was with some trepidation that I took stock of the situation. My confidence was not helped by a ring of interested faces as my platoon waited to see what the sahib would now do. Fortunately the kit included some fodder and gadgets for 'polishing' the beasts. So with the blind leading the blind I got the drivers to give them a quick brush up and a meal which seemed to please the mules well.

"After a day or two sorting out how the kit for the top dressing was made to stick and a few walkabouts it seemed time to get them into a vehicle. I conferred with my jemadar about this for he was a wise man much older than I. We smoked a couple of cigarettes whilst drinking some of that excellent strong condensed milky sweet tea which Indian army cooks always produced and a plan was made. We must first build a ramp, that much was plain, and this we did using the ever present bamboo for the purpose. Next we had to get a mule to go up it and here we were in unknown territory. All this was obvious however and exuding more confidence than I felt I ordered a mule to be brought forward. At first the mule, by shaking its head and setting its feet into the reverse mode, plainly indicated what it thought of the whole idea. Eventually it was induced to take a few paces forward whereupon its front feet and legs disappeared through the ramp. Clearly the mule was quite right and the ruling hierarchy of the PM Platoon withdrew shamefacedly to reconsider the matter. The MkII ramp was much better and we felt that this time the mule would approve but once bitten twice shy and the animal would have none of it. My jemadar, a resourceful man, suggested we should pass a rope round the mule's backside and with a few brawny sappers on each end catapult the animal into the truck. Having no better idea, I agreed we should try it. We did and it was effective, so effective indeed that the creature not only went into the truck but straight out again via the cab and bonnet. Fortunately without injury. The look of scorn on the mule's

face was very chastening. Suffice it to say that we did eventually solve the problem even to the satisfaction of the mules. We put them into the vehicle to feed them - unorthodox perhaps but who cares.

"Our next and final saga was when we took them on a three-day patrol into the hills. The Naga hills are in reality very high, up to over 7,000ft, very steep and clad in dense jungle with very few tracks and these mostly clinging to slopes which often exceed 60 degrees. We had by this time succeeded in loading the creatures with panniers and other bits of gadgetry to take our various tools. The result was a mule about three times its natural width. Mules, although clever, could not quite work this out and nor did it seem could inexperienced drivers. The result was that to start with they frequently tried to pass between trees which were in no way far enough apart with disastrous results. However the learning curve was steep. Meanwhile the whole patrol was bedevilled by torrential rain the sort you only get at altitude in places where the annual rainfall is measured in hundreds of inches. In the lead behind a couple of point men I suddenly became aware that there was no-one behind me. Retracing my steps I was just in time to see the reproachful look on the face of a mule disappearing over the edge. It crashed into the depths for what seemed forever and then there was silence. There could be only one decent thing to do and so checking that my revolver was loaded I squared my shoulders and descended with difficulty into the depths. About 60ft down there was the mule on its back against a tree with its load beneath it, its legs in the air and lying perfectly still. It was still alive, this much I could see, but it must surely be badly hurt how could it be otherwise after such a fall. Before giving it the coup de grace I unbuckled the straps securing the load and stood back drawing my pistol. However this was not to the mule's liking at all and heaving itself to its feet it went up the slope like a rocket leaving its load behind. Mules are very tough beasts!

"The next episode occurred the following day when on a particularly steep and for once grassy hillside the lead mule lay down on what was a very narrow path and refused to get up adding to the drama by groaning. This was very tiresome as it was quite impossible to get the other mules past. What to do? I began to think once more in terms of execution and tip the body over the edge when my ever resourceful jemadar said 'Leave this to me sahib'. 'Gladly' I replied and stepped back. Standing in front of the mule he then slowly and carefully picked a handful of dry grass which the mule observed with obvious interest since it stopped groaning. He then very deliberately set fire to the grass and clambering over the mule applied it to the beast's behind. The mule immediately knew that it had been rumbled and without an instant's hesitation it got to its feet and walked on as if nothing had happened. Mules have minds of their own but they are certainly not stupid.

"The patrol was completed without further incident and shortly afterwards we reverted to wheels again and the mules went off to try their wily ways on someone else. It was quite a sad day when they went."

71 Gurkha Brigade consisting of 3/3 OR, 3/5 RGR and 3/10 GR was holding the north-east area of Manipur state, with a battalion at a time based on Sangshak with a company in Chassaud and one in Chammu, maintaining contact with the Japanese on the Chindwin. A motorable road ran from Imphal to Yaingangpokpi and with some difficulty on to Litan. Thereafter there were tracks negotiable by men and mules. 91 Company was given the task of producing fairweather jeep/15cwt roads beyond Litan as far forward and as quickly as possible. Bearing in mind an annual rainfall measured in many feet even a fairweather road was daunting. The PM Platoon drew the short straw and augmented by a newly arrived subaltern Lt GB Dawson. Work was started in early December 1942. The sappers worked on rocky areas where blasting was needed and also provided direction for some 800 Naga tribesmen working in gangs of up to a hundred on other stretches.

The Nagas, headhunters for generations, had relatively recently come under British administration and some had even been converted to Christianity. Ethnically they were akin to other hillmen further north and west in the Himalayan chain and quite unlike the plains Manipuris both in appearance and attitude to life. They were scrupulously honest, proud but not insolent, as good a man as the next but no better - in short MEN. They undertook to work for 1 rupee 4 annas a day which to them meant virtually from sun-up to sun-down. Armed with implements provided by the sappers they moved prodigious quantities of earth and vast numbers of trees. Some of the later were quite large and when it was not possible to find a way round them they were removed. This was done by exposing the roots and attacking these with small Naga axes which had razor sharp two inch blades. In spite of frequent adverse weather conditions the road advanced at an average of a mile a day. The method the Nagas used for maintaining steady work was for the first man to strike with whatever tool he was using and emit a grunt the next and the next then joined in each producing his own preferred sound. The result was an extraordinary rhythmic chorus audible over a considerable distance. Sheldon urged them on by telling them that their efforts would help to keep the Japanese at bay. It was unfortunate that the Japanese made maximum use of the road in their subsequent offensive towards Kohima which resulted in major battles at Sheldon's corner and Sangshak.

Whilst work on the PM's road was progressing the remainder of the company moved first to Wangjing some 20 miles south of Imphal on the Pael road and later on to Tamu in the Kabaw valley close to the Yu river. Whilst in Wangjing the Sikh platoon suffered several casualties during watermanship training on Lake Waithou. They occurred when a boatload of sappers with the Sikh jemadar on board tried to refuel an outboard motor without first stopping it. Spilt petrol caught fire and a flaming petrol can was flung inboard rather than over the side. The passengers, all wearing boots and without life jackets (there weren't any), leapt into the water which at that point was some twelve feet deep and full of long frond like weeds. The boat, still under power, moved away from them and

all were lost. Their bodies were only recovered when the gases within them expanded in the warm water and they rose to the surface.

In the teak forests of the Kabaw valley the company was engaged in building bridges and operating ferries on the River Yu. In addition parties accompanied infantry patrols. Although whilst in Wangjing the first Bailey bridge anyone in the company had ever seen was available for training, the bridges in the Kabaw valley were mostly of the "elephant" type. That is to say they mostly consisted of teak logs some twenty feet long and twelve inches diameter which it was found a full grown elephant could lift and place in position. The elephants were under command of a fascinating character known as 'Elephant Bill' a one-time planter in Burma.

On handing over the road project in about May 1943 the PMs were moved to Shenam, otherwise known as the Saddle, on the divide some ten miles south of Palel. From that point the road south east plunged ever downwards to the Kabaw valley. On the Saddle itself several concrete tanks had been constructed and the task was to fill them with drinking water. In spite of the prodigious rainfall there was no useable water source within hundreds of vertical feet below these tanks. Equipment available included an unlimited supply of 4in victaulic pipe which, having rubber washers in the joints, had some flexibility. A lift of 600 feet was provided by a sledge mounted four stage centrifugal pump driven by a Ford V8 motor. Also available was a small hand held altimeter! The jungle in the gullies at this point consisted largely of densely packed finger thin bamboo with a ring of spikes at each node. Through this sort of barrier progress was measured in yards per day. The 3/5 RGR was also on the Saddle at this time and provided several sections of riflemen who were sent down likely gullies to find water. One section was eventually successful at the extreme limit of the pump's capacity. A catchment pond was constructed using a 40ft by 40ft tarpaulin and when everything was connected up the pump was started but no water reached the tanks. Eventually the reason for this was found to be a wooden bung left in one of the pipes. When this was removed the outlet ran full bore.

The remainder of the company remained in Tamu engaged as before but the PMs were once more moved this time to Shuganu thirty miles south west of Palel there to provide a brigade water point alongside the Thoubal river. At this time the company commander Maj JRG Finch was replaced by Maj AP Lavies and Sheldon was also relieved and returned to Dighi in September as Adjutant TB1.

Appendix D

2Lt Chambers and Fort Hertz Extract from war diary of 91 (RB) Field Company - July 1942

2Lt Chambers reported that he was intended to accompany a detachment of 150 3/7 Gurkhas to Fort Hertz in North Burma. The party left Dimapur for Dinjan aerodrome on the 14th but heremained behind at Dimapur in order to

collect explosives and engineer stores. He reached Dinjan two days later. The party was informed by 4th Corps that it would be flown to Fort Hertz under command of Colonel Stephenson, until recently of the Burma CS. At Fort Hertz the party would form a fortified base from which levies of the local hillmen would be raised by the Colonel, who was at that time in Delhi with GHQ and failed to get in touch with the party or to give any help. The detachment was told that it would be in Burma for 6 months and that there were only two routes out of the place - one into Tibet at 11,000 feet and one into Assam at 14,000 feet. Both were inaccessible for two-thirds of the year. The detachment drew 60 days rations but other essential stores and equipment failed to arrive. There was no quinine. No engineer stores such as nails. No clothing or boots. The 3/7GRs had no soles to their boots and only one blanket each. The 3/7 Gurkhas were just out of Burma and badly needed new equipment. Meanwhile 24 sappers went down with fever.

After a week in Dinjan the detachment was visited by a Mr Leyden and companion, who had come out of their way to see the detachment after hearing of its proposed task. Leyden actually acknowledged Stephenson as his friend. He was Stephenson's senior in peacetime. Leyden had just walked out of Fort Hertz, where he was DC, by way of the Chanken Pass - 14000 feet. He stated:

- a) He knew Stephenson well and that Stephenson had a glib tongue and literary diarrhoea.
- b) He had already put up one such scheme among the Chins which had ended in disaster.
- c) Fort Hertz had been looted and occupied by 5000 hunger-maddened Chinese.
- d) The Fort was a bamboo and mud construction stuck out in the middle of a plateau which was tree-less and surrounded by impassable fever swamps. A detachment of Burma Frontier Force was kept up there during peace-time, but this always withdrew during the rains. The local population cultivated the plateau during the dry season but withdrew into the hills during the rains.
- e) The local hillmen would not fight.
- f) The detachment could expect 90% casualties from blackwater fever and beriberi before the end of 6 months and that 30% of these would be fatal.
- g) That Stephenson regarded himself as the "Lawrence of Burma" and that he, Leyden, thought the detachment was the "seven pillars of folly". To add strength to this last remark the detachment's code name was "Pillar".

Leyden was asked to go to Delhi post-haste and get in touch with GHQ. The OC detachment drew up a report that in the view of all the BOs the scheme was crazy and gave reasons for such an opinion. He wrote that all the BOs were prepared to join a suicide squad if there was any chance that of accomplishing the object in view. In this case there was no chance. This report was submitted to GHQ through 4 Corps. The Air Force then drew attention to the fact that the only landing ground at Fort Hertz was a football field bordered by jungle grass.

Appendix E

Boat building Extracts from a manuscript by Maj WG Prow

In June 1942 the CRE of 23 Ind Div (Lt Col NEV Patterson), issued his requirements for small river craft, two of which would fit into a 30cwt truck, and each carry 15cwt of stores; it had to be light enough for two men to load it and be rowed by one man.

The OC of 305 (RB) Field Park Company (Maj MH Briggs) allotted the task to his 2IC Lt WG Prow. The Company was then at Imphal where there was a very well stocked and equipped PWD Depot. The civilian tradesmen, with their supervisors were available to augment the Company, and were useful in the design details, and after the first boat, took part in the construction.

The depot also contained a hand saw pit for converting forest teak timber to boards or scantlings. Two men were required to handle the saw, one above walking on the baulk, the other in the pit. This became useful once work started.

The size of the boat was determined by the shape of the cabin of the 30cwt truck - ie 12ft 6in by 5ft 6in, and the minimum displacement 15cwt plus weight of boat and one man - approx 4000lbs. Shallow draft was required so that the boat could be grounded at the river bank for loading and unloading. Basically it was a rectangular box with long slightly outward sloping sides and a flat bottom. The bow end was narrowed in plan and a slight rise to the bow was given to the floor to allow for grounding on shingle or sand.

Structural strength was provided by cross frames out of 2½in by 1½in timber bolted by 3in diameter galvanised bolts. Boarding was 5/8th inch finished thickness with the stern transom 1in thick to allow an outboard motor to be clamped on. Board to frame fixing was by bronze wood-screws and some galvanised nails. Rowlocks were two pins of pegs (with tyers to prevent loss). Oars were 6ft 6in long, made with hand tools (adze etc) in "Umlu", a locally growing softwood.

Boatbuilding is a specialist part of a carpenter's trade and the company carpenters had only a little experience in this. Conventional jointing (carvel or clinker) would not have been practical. The chief carpenter of the Manipuri depot squad, Tomba Singh, had built local boats. He was consulted. Manipuri boats had butt joints, filled with "masala" (resin, of which there was a copious supply in store was mixed with mittipatel (paraffin) to a treacle consistency). A trial sample showed that it dried quickly on the outside and hardened to a rubbery next layer and a plastic interior. The paraffin carried the resin into the wood grain making an adhesive in effect. Even after hardening, if broken open, the exposed surface hardened. The PN Boats joints however were chamfered, sloped down towards the water 30° to increase the width of the joint.

The first boats were built under the Section Jem Sheik Usman, with Tomba Singh and company carpenters; Sergts Callaghan and Nicholson assisted in the mechanical workshop. Later there were two squads, one company and one Manipuri. Boats were painted before use. Boats were taken for trials to Waithou Lake, Imphal and they were inspected by the CinC, General Wavell on 11th October 1942.

Appendix F

Nominal roll of those known to have served with RBS&M units in the Assam build up June 42 - March 44

HQ 20 Indian Divisional Engineers

CRE	Lt Col WA Turner (to Nov 1943) Lt Col ARS Lucas (from Nov 1943)
Adjutant	Capt RHC Greet (to Sep 1943)
LtS	AP Cumming, RE Greenway (from Sep 1943), RG Kidd and FE Poole.
BNCO	Sgt Barratt

HQ 457 (RB) Forward Airfield Engineers

CRE	Lt Col Marshall (to Aug 1943), Lt Col R Clayton RE,
Lt	Lt CJ Cooper

24 (RB) Field Company

OC	Maj GVC Darley (to Jul 1943), Maj FM Hill (from Sep 1943 to Dec 1943), Maj JFW Rusted (from Dec 1943)
2IC	Capt JM Walsh, Capt JS Beddows
LtS	EAG Williams (from Aug 1943), RL Anand IE (Acting OC from Dec 1943), HC Butlin, AGS Crawford (to Oct 1942), RW Spenser
VCO	Sub Hari Bhau (to Feb 1944), Sub Baburao Shinde (from Feb 1944), Jem Karora Singh

91 (RB) Field Company

OC	Maj JRG Finch (to Jul 1943), Maj AP Lavies (from Aug 1943 to Dec 1943), Maj JS Beddows (from Dec 1943)
2IC	Capt H Coates
LtS	HE Allison (became 2IC Jan 1944), RBWP Chambers, GB Dawson, JW Gordon, JR Hudson (mentioned Jan 1944), Latham (mentioned by Sheldon), HA Mavor (from Apl 1943), R Mitchell, (as Capt and 2IC to 16 Jan 1944, acting OC 23 Jul 1943), Newsome (mentioned Jun 1942), KA Parrott (from Jul 1942), WL Sheldon (from Oct 1942)
BNCO	CSM Farrow (mentioned Apl 1943)
VCOs	Sub Narayana Hande, Jems Shivaji Jadhao, Gul Singh, Amar Singh I, Amar Singh II, Fazal Din, Karan Ali (mentioned Jan 1943), Mahded Nilkant (mentioned Apl 1943), Mohd Khan (mentioned Appx D)

Field Company

OCs Maj AC Lewis (to Jan 1944), Maj JH Clarke RE (from Feb 44)
 2ICs Capt D Anderson, Capt HCW Austin, Capt SR Holt
 Lts Lts C Bryant, HW Jacomb Hood, RA Horn, T Jackson, C Pearson,
 R Riddell, TG Sandeman; AP Cumming (on loan from HQ 20 Div
 Engrs for a time in early 1944)
 VCO Jem Bhagwan Sakpal

305 (RB) Field Park Company (Transferred to RBS&M 1 Nov 1943)

OC Maj MH Briggs (to Jul 1943),
 Maj WG Prow (from Jul 1943)
 2IC Lt WG Prow (to Jul 1943), Capt Dollin (Jul to Nov 1943), Capt
 Lishman (from Nov 1943)
 Lts Beaton, Dollin (to Nov 1943), TL Satchwell (from Sep 1943)
 VCOs Jem Karan Ali, Sheik Usman
 BNCOs Sgts Callaghan, Nicholson

363 (RB) Field Company

OC Maj W Westerman (to Sep 1943), Maj HG Crabtree (from Sep 43)

402 (RB) Field Company

OCs Maj BS Downward (to Jul 1943), Maj IG MacLaurin (from Jul
 1943)
 2IC Capt AW Clarke
 Lts WF Faulds IE, PM Leslie Jones (to Nov 1943), PM Pilditch (to
 Aug 1943), AB Shepherd

481 (RB) Field Company

OC Maj MI Prichard
 2ICs Capt PEF Rhodes, Capt RCH Greet (from Sep 1943)
 Lts WM Colvin, AN Fradgley, IJ Middlemass, KA Parrott,
 TW Prentice, JR Staggs
 VCO Sub Bachan Singh

9 (RB) Bridging Platoon (Section until autumn 1943)

OCs Lt FE Poole from July 1943, Lt PM Pilditch
 (from Sep 1943, later Capt)

15 (RB) Bridging Platoon (Section until autumn 1943)

OC Lt JN Mullan (Capt from Mar 1943)
 VCO Sub Raoji Ranawde

CHAPTER SIXTEEN

HQ 491 (RB) PLO Engrs,
 492 (RB), 493 (RB), 494 (RB), & 499 (RB) PLO Companies,
 495 (RB) & 496 (RB) PLO Platoons and Garrison Engrs (oil)

Compiled by Major DC Browning

WPG MacLachlan and JAR Colman of the Burmah Oil Society provided valuable background information. Dates and names are mainly taken from unit war diaries, but the substance of the details from the memoirs Capt T Davis, Lts P Blampied, M Derenburg and J Heywood also Majs P Wakley and C Baillie. (See also general background sources for Part IV)

Background

In May 1942 a majority of the British and Indian Forces in the Burma campaign had withdrawn to the Imphal area and a stalemate in general had developed on the Burma front. By this time the airlift over the 'Hump' to China had built up from the four US airfields at Chabua, Mohanbari, Sookerating and Dinjan that were situated in north-east Assam. When the build up in Assam started at the end of 1942 it soon became apparent that the poor rail, road and waterway communications to eastern Assam were inadequate to support the requirements of the British, Indian and American forces necessary to halt and turn the Japanese advance. Air supply and air support were essential as was the aviation fuel required to fly the many thousands of sorties from the forward airfields, which first had to be built. Maj Gen IH Lyall Grant MC says in *Burma: The Turning Point* "three of the battles could not have been won without air-dropped supplies and all the others were dependent on reinforcements and supplies flown into Imphal by air. 17 Indian Division was in fact supplied by air for exactly one hundred days and the whole Imphal garrison of four divisions for eighty-six days. Never had an army been so utterly dependent on air supply." Initially the stores and fuel were transported by the narrow-gauge, mainly single track, railways backed up by water movements up the Brahmaputra. Arrangements to relieve these bottlenecks were therefore made to move the motor and aviation fuels by pipelines from the ports of Chittagong and Chandpur and from eastern India. The Americans built two six inch pipelines from Calcutta to Ledo, to supply the 'Hump' route; whilst the British/Indians built a four inch line from Badarpur to Manipur Road (Dimapur). This was then extended south to make a 140-mile line from the ports of Chandpur and Chittagong, via Comilla to Manipur Road. An extension line forward from Manipur Road was also built to Kohima and then on to Palel and Tamu.

Formation of Units

By the early spring of 1943 a General Reserve Engineer Force was carrying out the engineering work to construct the new airfields in Assam and Bengal, together with the ancillary tasks involved. These included the laying of the British/Indian pipelines and associated oil tank farms by units titled 'Northern Airfield Pipeline Engineers'; these consisted of various units from non-specialist sapper companies to pioneers. In June 1943 491 (RB) MR Company was formed in Dighi/Kirkee, under Maj (later Lt Col) CV Cole IE, mainly officered by experts from the Burmah Oil Company. The abbreviation MR stood for 'Mechanical Reconstruction', as the MR Companies were originally intended to rehabilitate and operate the Burma oilfields once they had been recovered. In July 1943 492 MR Company, under Maj GF Wilson, was also formed up at Dighi. Lt T Davis was one of its officers and says that the Company comprised the usual mixture of PMs, Sikhs and Mahrattas together with British Sergeant technicians and 3-ton workshop lorries.

493 (RB) MR Company under Capt (promoted Major in October 1944) JF Ramsden and 494 (RB) MR Company under Capt JA Hayden were then formed up in sequence. 495 and 496 (RB) MR Sections were formed up under Lts RD Kaye and RG Kidd respectively. These units were later redesignated as Pipeline Operating Platoons.

499 (RB) Pipeline Operating Company under Maj KW Henshall, however, was not formed up until June 1945 in order to assist with the post-war decommissioning of the lines.

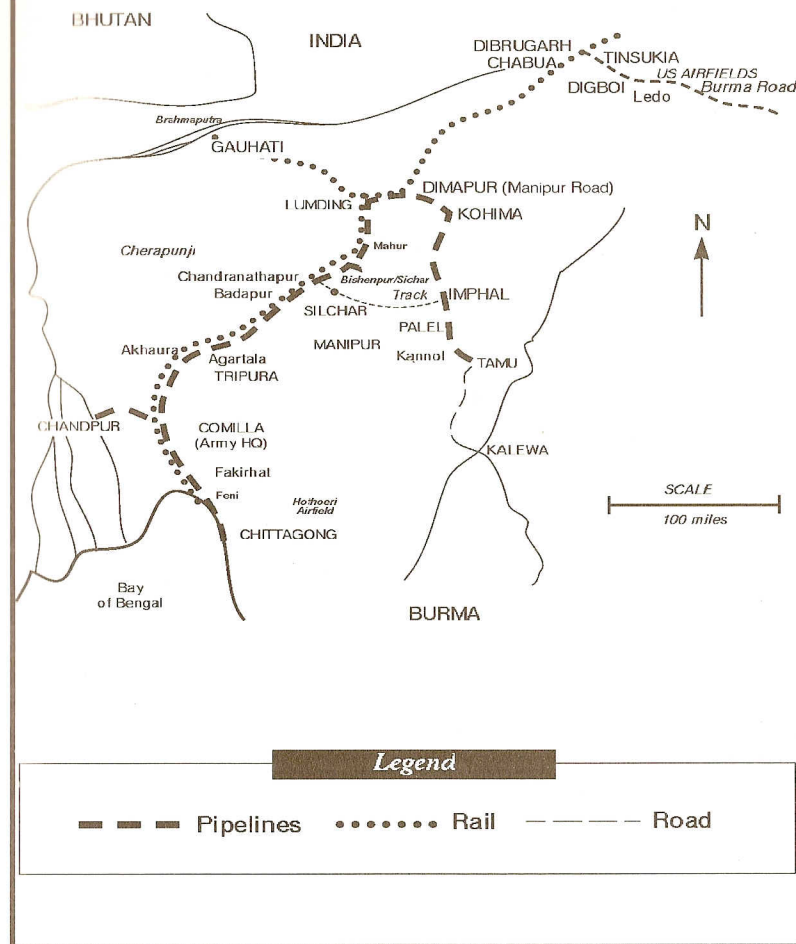
Terrain

The terrain through which these pipelines were constructed was extremely rugged, particularly the sections around Kohima, Palel and Mahur. The valleys were narrow and very steep, covered in dense tropical forest, almost impenetrable other than along narrow tracks. The only access to Imphal from the railhead at Dimapur was by a single road cut into the side of the mountain - at one point rising 3,000 feet in 20 miles past Mount Japvo (9,800 feet). The traffic at this time was continuous. Lt Davis recalls that on one occasion he met a rather dazed Indian RIASC driver climbing out over the khud on to the road with his bedding roll in his arms. The wheels of his three tonner were just visible 100 feet below! He says that it did not pay to take too long a nap at the wheel, even when going up-hill. There were very few villages in this area. Sometimes one would meet a row of Naga women, singing their way up the hill with enormous loads on their backs.

Operations

491 Company on arrival from Dighi was initially based at Dimapur, near the Manipur Road rail junction, before being moved on to Chabua near Dibrugarh

Pipelines Built by Royal Bombay Sappers & Miners Pipeline Companies 1943-46



and the Burmah Oil installations at Digboi, where they were then engaged in helping to maintain the fuel supply to the US 'Hump' airfields.

492 Company left Dighi on 1st August 1943 and had a journey of 11 days to Manipur - by rail to Dhubri, up the Brahmaputra to Pandu and then on to the rail junction at Tinsukia. They were based in the Chabua and Tinsukia area where, as well as maintaining the pipelines, they also constructed additional oil tankage. Lt Davis of 492 Company indicates that during the period September 1943 to July 1944 they were mainly engaged on the construction of a pipeline and ancillary works for the conveyance of aviation fuel from tankers on the Brahmaputra at Dibrugarh to the US airfields at Chabua, Dikom and Mohanbari. On 17th April 1944 the *Calcutta Statesman* published a photograph on its front page showing Jem Jalal Khan and jawans of the Company constructing a 100,000 gallon fuel storage tank.

At about this time the MR Companies were redesignated as Pipeline Operating Companies (abbreviated as PLO) as their main task was now to be the construction, operation and maintenance of the British Indian pipelines. In January 1944 the role of 491 Company was upgraded to that of a co-ordinating HQ Unit under a CRE and contained many Burmah Oil Company oil pipeline experts. It was also renamed HQ 491 Pipeline Operating Engineers.

By the end of March 1944 the unit had relocated to the Manipur Road area. In May the HQ had taken under its command certain units that had been constructing the northern airfields pipelines and tank farms. These were 492 and 494 Companies, 609 E&M Company, A&D Companies 9 Engineer Battalion, 926 Ind Works Section and 1452, 1316 and 1508 Companies of the Indian Pioneer Corps and also a GE Oil. The pipeline was usually laid in a trench, dug by the Pioneer Corps, along the inside of the road. At nullahs during the monsoon period the whole road was often swept away. Each section was responsible for up to sixty miles of pipeline and at any one time there would be five or six parties led by naiks, who were laying and jointing pipes, building storage tanks or assembling heavy pump units with their manifolds on concrete foundations. They finally tested each section as it was completed. Finding leaks during the 1944 monsoon was often difficult. There were always deadlines initiated by HQ or there were delays caused by missing or undelivered equipment, transport breakdowns etc. There were also frequent landslides that blocked off the road cutting off access.

In July 1944 492 Company had also left the US airfield area and commenced the work of constructing, operating and maintaining the pipelines feeding the forward troops and supply airfields. The main work of constructing the Dimapur (Manipur) to Pael pipeline started immediately after the battle of Imphal. This project involved laying over 150 miles of 4in cast iron pipes connected by Victaulic joints. This was along the Kohima/Imphal road rising in places to 5,000 feet above sea level. Ten pumping stations were required, each equipped with Waukesha centrifugal, or Buda reciprocating, pumps, and having balancing

and/or break-pressure tanks of 10,000 gallons capacity. The pumps generally worked up to static heads of 200psi with the pumping stations being up to 60 miles apart. Construction of the Kohima to Pael and Tamu pipeline from Manipur Road was carried out jointly with 493 Company (once it had been moved up), working on the southern section of the line near Pael, and with 492 Company taking on the northern section as far as MS64.

494 Company under Capt JA Hayton arrived at Manipur Road during November 1943 in order to complete the installation and operation of the pipeline from Chandranathpur to Manipur Road. This was the steep part of the rail route from the coast and was the first part of the railway to be by-passed by the pipeline. The Company also did some work in the Imphal area. The Company was very spread out along their sector and their health was suffering very badly with a Lance Naik and a Sapper dying from malaria. The OC also went to hospital for a month, followed by Lt DAB August in June. It was also not until June, however, that the unit's requests for an MO bore fruit.

On 5th July 1944 the first batches of aviation fuel arrived at Manipur Road with a throughput of 130,000 gallons per day (quantities being restricted by the available storage at Manipur Road). A motor spirit batch was first received in late July and by August 1944 the Company was pumping alternate batches of aviation and motor spirit up the line on a three to four day change-over cycle.

493 Company under Capt JF Ramsden, was originally based at Chandpur but soon moved in May 1944 to Chittagong and then in July to near Comilla, where it was involved in constructing the southern leg of the pipeline system between Chittagong and the village of Feni and later further north at Fakirhat. By September they had fuel reaching Comilla from the port. The company was then moved by rail to Akhaura, to work on a more northern part of the line, with petrol reaching Agartala during November. The southern section from Chittagong was handed over to the GE Oil. By December they had nine pumping stations in operation. It was at this time that Maj JPA Jackson (from 18 (RB) Field Company in the Western Desert) took over. By May 1944 the throughput of this line had reached 130,000 gallons per day.

Also in May 1944, 495 and 496 Sections moved from Kirkee to Chittagong. 495 Section subsequently moved its HQ north to Chandranathpur where 494 Company trained them in pipeline work. By August they were capable of taking over and operating part of 493 Company's sector of the southern line from Chandranathpur to Mahur. In December it was reported that they were involved in extending the line and operating three pumping stations, clearing jungle and also excavating for and erecting storage tankage.

At the same time 496 Section was moved to the Manipur Road area, where it was also trained by 494 Company. By October it was operating two pumping

stations, and by the year's end it was operating the whole northern part of this line from Chard to Manipur Road, having taken it over from 495 Section/Platoon.

Mention is also made in HQ 491 PLO Engrs War Diary of 26 March 1944 that the newly formed HQ had a GE (Oil) under its command. It would appear that he had MES operators under his control and took over the pipelines from the various PLO Companies and Platoons once different sections of the line had become stable and were operating relatively smoothly. The first reference to the GE (Oil) is in 493 Company's war diary which indicates that the company handed over the pipeline from Chittagong to Feni on 21 September 1944 and from Feni to Comilla on 29 September to the GE (Oil) at HQ 491 PLO Engineers.

Damage and Leakage

As may be expected there were frequent leaks and breakage of the victaulic couplings on these wartime pipelines. These were due both to land slippage and also to accidents on the adjacent railway tracks. A few of the coupling breaks were repaired by welding the victaulic joints. 494 Company's War Diary reports one rail accident during November 1944 that involved consequential damage to the pipeline.

Lt Davis of 492 Company also refers to landslides having caused losses on the pipelines. During heavy storms the valley surfaces became very unstable and whole sections of pipeline would slip down the slope. One major earth slip caused a victaulic joint to break between two 4in diameter pipes, leaving the upstream side discharging at full bore until the pressure drop showed up on the instruments at the previous pumping station. He reports that in August 1945 they had seven leaks in four days. On one occasion he had to attend a Court of Inquiry investigating the loss of 25,000 gallons of gasoline - luckily not from his section of the line!

Lt Wakley indicates that where the operational need demanded they would miss the weekly day's routine maintenance shut down. There would then be twice the number of holes at about 20ft intervals which smelt of petrol. The passing Bengali villager would then put old milk tins underneath the pipe to catch the drips; he would subsequently forget where he had put them and go looking for them with a naked light.

Lt Heywood reported that the jungle lore was 'twenty million gallons in at Chittagong - one million gallons out at Manipur Road'. He goes further than Lt Wakley to say that not only did the local tribesmen catch the petrol drips, but that they actually drilled the pipes to collect the fuel which they then mixed with sand to make a super cooking method.

Closing Stages

Lt Heywood joined HQ 491 PLO Engineers from Bangalore EOTS via Kirkee in February 1945. His first CO was Lt Col Cole, an ex-Burmah Oil man, who was replaced in the autumn by Lt Col Crook. In February 1945 the companies were still pumping alternate batches of motor and aviation spirit, separated by plugs of water, whilst maintaining the intermediate pumping station tankage as full as possible. Lt Heywood indicates that by this time the whole operation ran itself, apart from the leakages. Part of the time he was stationed in the jungle near Agartala the capital of the small Indian state of Tripura with a beautiful white palace surrounded by flooded paddy fields, which were separated by ramshackle bunds. He says that one means of travel was along the railway line using a 'Pump Truck' that was very tiring to operate and impossible to get up the hilly sections of the route. He remembers being driven in a jeep, by his second CO, at breakneck speed up and down the pipes from Chittagong to Manipur road and also down to Tamu. The climate was frightful. Nearby Cherrapunji was alleged to have the highest rainfall in the world. Everything got covered in mildew, pillows etc always damp. The only relaxation was meeting nearby Americans, with whom rations were exchanged, and meeting QA nurses from the hospital.

In May 1945 Lt Wakley also joined the pipeline operations as AGE (Oil), under the GE (Oil), Maj Tring, who had an MES Section. Lt Wakley was given responsibility for the first section of the pipeline out of Chittagong, about 250 miles, with his HQ some 20 miles to the north. He had a civilian Sub Divisional Officer to help, together with a 15cwt. truck. The actual pumping stations etc were by this time manned by MES personnel, who were well versed in their jobs. He indicates that each pumping station had three pumps, which were usually run two at a time, rotating every four hours. Pumping was for six days each week, the seventh day being spent carrying out repairs after first having reduced the pressure. These repairs included checking the packing of the victaulic couplings between the pipes, as they were adversely affected by the spirit being pumped along the line. Communication between the pumping stations etc was by means of field telephones. These were not very efficient and "all station calls" usually had to be handled on a one-to-one basis. Also there was possibly a spur pipeline to Hathazari Airfield, where the GE (Airfield), Peter Watson, was another RBS&M officer.

499 Company, formed in June 1945, moved to Imphal, via Calcutta, with the main party arriving at Manipur road on 20 June. They were then repositioned to MS 30% on the Imphal to Tamul/Palel road where they took over the operation of the difficult Palel section of the pipeline from 604 E&M Company. In August they also took over the operation of the water supply point from GE 920. The war diary shows that by December 1945, once the northern area pipelines were operating satisfactorily, HQ 491 PLO Engrs had relocated south to Akhaura on the Comilla to Manipur road route. A CRE's conference note of 13 December 1945 indicates that those present included Maj Durrant as OC 493 Company, Maj

Gordon as OC 494 Company, Maj Henshall as OC 499 Company and Maj Tring as GE (Oil).

During late 1945 and early 1946 orders were received to cease fuel movements and to uplift the pipelines and ancillary equipment, returning as much as possible to Engineer Stores Depots etc. As the war was now over there was a considerable change-over of both the British and Indian members of the pipeline units due to relief, repatriation, leave and postings. At the end of January 1946 the War Diary of HQ 491 PLO Engrs states "shortage of experienced officers now limits any new works on the pipeline but it can be maintained if the Group is disbanded".

499 Company, whilst still at MS30½, received orders on 10 September to pump the line clear of petrol. They reported that the pipeline Kannol - Tamu had been filled with water by the 28th. The pumps and other stores on their sector had been despatched to No 2 Engineer Park by 14 November. The company was then moved to Kannol Petrol Depot at MS126 where 1530, 1422 and 1459 Companies IPC were attached in order to assist in the dismantling of the pipeline. During December work was also carried out on the tankage at Imphal airfield. On 17 December Lt MP Derenburg joined the unit and 1354 Company IPC was attached.

During January 1946 494 Company's war diary indicates that work continued lifting the pipeline with the comment "Pioneer Company unable to lift more than one mile per day". By the end of January much of the uplifting had been completed. There was, however, no crane or petrol available, nor had the timber packing been received for back-loading the stores. The work was therefore behind schedule. By 15 February it was reported that all salvageable pipes and equipment had been returned to engineer stores. 494 Company then returned to Kirkee and was disbanded on 14 May 1946.

Lt Davis says that 492 Company had handed over some of its pumps to 758 ME Company on 1 November 1945. Lt PG Blampied joined 492 Company in December 1945 and was sent with a detachment of Sikhs to dismantle the pipeline near Kohima and also to remove a petrol storage tank near Imphal. He says that during this period his conversation was entirely in Urdu. It cannot have been all that bad however as he says that he also found time to meet the QAs from the local hospital near the end of the railway line and eventually to marry one of them.

Disbandment & Dispersal

Once the lines and equipment had been uplifted and returned to stores, the units moved back to Kirkee and were disbanded, the last on 1st July 1946. Lts Wakley and Watson joined 96 Company near Chittagong and went on to Hong Kong, Maj Jackson went to 481 Company in Saigon and Lt Col Crook was posted

to CRE (Works) Kuala Lumpur. Capt Knight, Maj Henshall and Lt Blampied returned to the UK, Lt Hayward staying in India until June 1947.

Summary of Completed Allied Pipelines

North Burma oilfields area (Dibrughat/Tinsukia/Digboi)

174 miles of four inch pipeline completed before Aug 1944.

491 (RB) and 492 (RB) MR companies assisted USA Engineers in pipeline and ancillary work.

Chittagong - Tamu System

The four inch pipelines built by RB Pipeline units:

1. Chandranathpur to Dimapur 160 miles completed Aug 1944

2. Chittagong to Chandranathpur 290 miles completed Feb 1945

3. Dimapur to Imphal 134 miles completed March 1945

4. Imphal to Tamu 184 miles completed May 1945

5. Tamu to Kalewa abandoned

A gravity pipeline was also run from about 15 miles north of Imphal to feed the airfields at Imphal, Tulihal and Kangla. Barrel filling plants were installed at the Imphal and Moreh tank farms.

USA engineers also built two six inch pipelines from Calcutta and from Chittagong to Tinsukia (total 1321 miles) in 1944 and early 1945. From Tinsukia to Myitkyina (292 miles) a four inch line was completed in Oct 1944, a second one in Nov 1944 and a third six inch in June 1945. Extensions to Bhamo (101 miles) were completed in May and June 1945. One line was further extended to Kunming (677 miles) also in June 1945.

Nominal Roll of those known to have served with RBS&M Pipe Line Units

Note (B) = ex Burmah Oil Company

HQ 491 (RB) PLO Engrs

CREs	Lt Col CV Cole IE (B) to Autumn 45 Lt Col T Crook onwards
	Lt Col AJW Morrison from early 46
DCREs	Majs RD Penny and VD Nahapiet IE
Adjs	Cpts J Scobie, GK Smith and FM Sexton
FEs	Cpts AF Barker, GS Homewood, EP Scott, WT Knight, and JS Preston IEME (B)
	Lts WTJ Robertson, JA Robb, J Heywood and FC Slinger RIASC (later IE)
Rank Unknown	Barnet, Buchanan, Carr, Hutchinson (all B)

492 (RB) PLO Company

OC's	Maj GF Wilson IE (B), AF Barker from 2IC
2IC's	Cpts GS Homewood, TG Davis
Subalterns	Lts C Derrick, LRG Clemens, PG Blampied, P Shelden, Hyslop, Mair, Watkins

493 (RB) PLO Company

OC's	Maj JF Ramsden to late 1944, Maj JPA Jackson from Dec 1944, Maj Durrant from Dec 1945
2IC's	Cpts Mustin, WTJ Robertson (B)

494 (RB) PLO Company

OC	Maj JW Gordon
2IC	Capt JA Hayton IE

Subalterns Lts JVP Braganza IE, GS Dawson, DAB August

499 (RB) PLO Company

OCs

Maj KW Henshall

Maj WTJ Robertson (B) from Jan 1946

2IC

Capt WF Conway

Subalterns

Lts LRG Clemens, MP Derenburg, P Sheldon, Roe

495 (RB) PLO Platoon (section to Sep 1944)

OIC

Lt RD Kaye

496 (RB) PLO Platoon (Section to Sep 1944)

OsIC

Lts RG Kidd, FM Sexton, Snell and Watson,
and FC Slinger IE

Garrison Engineers

GE (Oil)

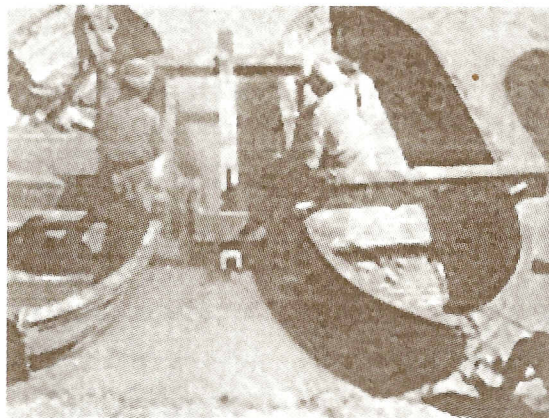
Maj Tring

AGEs (Oil)

Capt Voschek Baus IE, Lt WPV Wakley

AGE (Hathazari Airfield)

Capt P Watson



"Fradgecraft"
(see page 481)

CHAPTER SEVENTEEN IN ARAKAN 1942 TO 1945

8 Indian Division

HQ Engrs, 20 (RB) Field Company

14 Indian Division

26 (RB) Field Company

25 Indian Division

93 (RB) Field Company

26 Indian Division

28 & 98 (RB) Field Companies

328 (RB) Field Park Company

36 British Division

HQ Engrs, 30 (RB) Field Company

15 Corps Troops

HQ Engrs, 24 (RB) Engineer Battalion

483 (RB) Field Company

Malerkotla Field Company (to Nov 43)

403 (RB) Field Park Company

11 (RB) Bridging Platoon

Army Troops

37 & 401 (RB) Field Squadrons

96 (RB) Field Company

Compiled by Brigadier CH Cowan CBE DL

The general background for this chapter has been drawn from Field Marshall Slim's great book *Defeat into Victory* and Col Sandes's *The Indian Engineers 1939-47*. The main sources for the details are the unit war diaries and the contributions and comments of officers who served with the units: Colonels SH Clark OBE DL, WCS Harrison CBE and CWR Story; Lt Cols EHP Berry, WW Branford, JHF Salberg and WL Sheldon; Majs C Baillie, CJ Bewlay, HE Buckley, W Carter, KH Lambert, L Lubett and WPV Wakley; Capts RG Atkinson, D Elbourne, MW Guthrie, MC, ST Lawrence, JR Moss CB, DH Stanley, PF Whitely and DS Young MC and the compiler.

Background

Arakan was a division of the former British-Indian province of Burma; the name derives from the old kingdom of Arakan which was independent, the principal maritime state in the Bay of Bengal for some three centuries before 1784, when it was annexed by the ruling Burmese dynasty. At its greatest, it stretched from north of Chittagong almost to Bassein at the mouths of the Irrawaddy. The eastern boundary ran down the almost impassable mountains, the Arakan Yoma, which separate it from Central Burma.

The campaigns in Arakan were fought on the coastal strip of paddy fields, swamps and small jungle hillocks, in the valleys of the Kalapanzin and Kaladan Rivers, and on the hills between them. Movement between the coastal strip and these valleys was difficult in the extreme, and the only passes into central Burma

were rudimentary tracks well to the south of Akyab - the An Pass and the Taungup-Prome "road" (80 and 120 miles respectively to the south-east of Akyab).

Arakan presented unique and extreme problems. It was one of the least healthy parts of the world, as could be seen from the gravestones in the Chittagong cemetery of dozens of officers lost through fever in the first Burma War (1824-1826). The rainfall, almost wholly in the four monsoon months of May to September, was of the order of 300 inches per year; falls of an inch in an hour, and six inches in a day, were common. Mountain chaungs could rise 6 feet in an hour, and rivers in spate running at 6-8 mph could wash away whole villages and trestle bridges in moments. There was no proper stone; hence bricks were baked in tens of millions for the road south from Chittagong. The Mayu Range consisted of razor-backed ridges rising to 2200ft, with a geology described as a "decayed laterite"; and decay it could, and did. What appeared to be solid boulders could break up under mule traffic in a matter of days. The hills were covered in thick jungle, and the soil in many places was at its angle of repose, so that the removal of trees or undergrowth immediately set up the conditions for a landslide.

In each monsoon the military requirement was to hold both sides of the Mayu Range, for which a reliable supply route across it was essential. The provision and maintenance of this was the major engineer task in the monsoons.

26 Ind Div under Maj Gen Lomax took over the aftermath of what Wavell described as his gamble, the first Arakan campaign. This was in early 1943, and the division was under-trained and poorly equipped; two-wheel drive vehicles, ancient wirelesses, poor clothing and the supply line was stretched to the limit. After a forced withdrawal from the Maungdaw-Buthidaung area (map Page 332), the division settled for the monsoon in firm bases at Bawli, Goppe and Taung Bazaars. Sporadic patrolling continued, but both sides were more concerned with consolidating and preparing for the next dry season. Road-head was at Taungbro on the Naf River, with maintenance thence to Bawli either by barge or mule. Forward from Bawli was entirely by mule. Accommodation was in bamboo bashas built by the locals with surprising speed and dexterity; quite comfortable and reasonably watertight. The Indian soldiers' food was adequate, with meat (goat, arriving on the hoof) once a week. The UK ration consisted largely of soya link sausages, said to be highly nutritious but in fact quite inadequate.

Health was a major problem, particularly for Europeans. Malaria was endemic and many had the malignant variety, relapsing into fever every fortnight. Mepacrine was available, but its use was not properly understood and it was not until late in 1943 that malaria became controllable, following the results of Australian experience in New Guinea; this proved that a consistent level of the drug had to be maintained in the blood at all times. By the end of the monsoon almost every European had some sort of disease from boils and blains (deficient nutrition) to malaria, dengue, sandfly, sprue and dysentery; and there was a world epidemic of jaundice.

The main engineer task was the maintenance of the 10 mile mule track from Bawli to Goppe. Under any pressure the hill laterite turned to mud and, as many hillsides were already at the angle of repose, a slope could become a slide of mud two feet deep after a few minutes of mule traffic. As there was no accommodation at the centre of the range, working parties had to struggle long distances to get to the steeper and more difficult stretches. Forward of the road head at Taungbro engineering methods were primitive. Piling was of the simplest "rope and trip-hook" variety; so-called rocks were drilled with jumping bars; timber was cut by hand in saw-pits with eight-man relays and a gang of saw-doctors. The timber was magnificent but dauntingly hard; on a celebrated occasion a replacement road bearer, laboriously cut by hand in a pit over several days, was slid downhill with great difficulty to a chaung to be floated downstream; and it promptly sank.

Maintaining a crossing over the 200 yards wide Pruma Chaung at Bawli was a major task, sometimes very difficult in a spate of some 6 knots, or in rain squalls limiting visibility to a matter of yards. Outboard motors were underpowered and very unreliable. A mordant memory is of a strange and rather pompous brigadier in a folding boat whose motor had stalled disappearing downstream towards the Japanese at high speed; his last words "is this crew competent to ferry me?"

An occasional excitement was the arrival of what had been the Commissioner of Arakan's launch, a fine 40 year old steamer capable of 15 knots and so able to stem the floods in most conditions. Its boiler was a welcome means of drying clothes properly. Another excitement was the passage of mule companies across the Pruma Chaung. This involved elaborate hessian screens on a folding boat raft, to persuade the mules that they were not on the water. The mules were not too sure about this, and their officers and NCOs were masters of persuasion and knew exactly how best to handle each mule; of this art the past master was Capt Dunseath, one-time rough-riding sergeant of the Royal Scots Greys. To cross a company of some 250 mules could take all day. An alternative, if the water was slack, was to swim them across; but this was risky because, if a mule got its muzzle under water, it was liable to drown.

The Dry Weather

From mid-September to February the climate was comparatively cool and dry, interrupted by the mild north-east monsoon in November and December. In these months the hill country was surpassingly beautiful, with flowers and creepers of all sorts and colours. But as the land dried out, dust on the tracks became unpleasant and sometimes overwhelming. One could spend a day wearing shorts only, with dust bound by sweat, as protection from the sun. As the chaungs dried out it became possible to make tracks along them and fords across the bigger ones.

The Local People

The inhabitants of northern Arakan were Chittagonian Muslims, eking out a poor living on a mainly rice economy. Further south, from beyond Maungdaw, the people were Mughls, from whom came most of Calcutta's European cooks, and Burmese. The Muslims were and are the traditional enemies of the Mughls and Burmese; they supported the British and would provide intelligence.

The Muslims were employed in large numbers as coolies; 26 Field Company, for example, regularly had 500 or so in employ. They were not physically robust, and the labour output was not great, but they had one great and welcome ability, viz the production of bashas at great speed. The bamboo was cut in the local forest and used as structural elements and split for roofing and screens.

The 1944 Monsoon

By April/May 1944 it was clear that a major Japanese offensive was on the way on the Imphal front. General Slim regarded it imperative to reduce any demands, particularly air support, from Arakan. For this reason, and to avoid sickness, 15 Corps withdrew to the line Maungdaw - the high ground west of Buthidaung - Taung Bazaar. It was therefore necessary to maintain all troops east of the Mayu Range by ground movement across the range throughout the monsoon.

Conditions had changed out of all recognition from those of the previous year. Lord Mountbatten had said that operations were to continue through the monsoon. Ration scales were adequate. Huge strides had been made in health. The use of mepacrine was properly understood and operated. An officer's signature had to witness that each individual soldier had taken his pill, and treble overdoses were given to those going on patrol or leave. It worked and a commanding officer was held personally responsible if one of his soldiers developed malaria. There were so many improvements. Jeeps had arrived and all vehicles had four-wheel drive. New wirelasses; excellent jungle green uniforms; Sten guns; light-weight mosquito nets, to mention a few. A great morale raiser was the appearance of the newspaper SEAC, brought out by a former editor of the Daily Mirror.

The main artery for maintenance across the Mayu Range was the Goppe Pass, transformed by April 1944 into a dry-weather single track 3-ton road. It was supplemented by an aerial ropeway brought from an Assam tea garden, to lift forward from the Mayu ridge summit to Goppe. It had its moments (see the account later *The Suspension of Civil Power*).

In the monsoon, the road became impassable for vehicles; bridges were washed out; whole hillsides slipped down and the lower stretches flooded. Maintenance required a field company and hundreds of pioneers and coolies.

The Mule

These wonderful animals and their handlers (khachharwale) were the real heroes of the monsoons. They kept going in all weathers, they were steady under fire, and they could live on the country. They were splendidly sure-footed and, when they did fall, they often just picked themselves up and tried again. In contrast the horse was a sad failure; not nearly as sure-footed, liable to all sorts of diseases and needing special fodder. The tail of a mule was an excellent support for one trying to cross a chaung in high spate.

Most of the mules were bred on special farms in India and the 1943 animal could carry a maund (80lbs) on each side of its saddle. Sapper and Miner equipment was designed in 80lb loads with special tool and equipment boxes and carriers (khajawas) for picks and shovels. A field company about to move would lay out two parallel lines of loads and the mules would be led in one by one between the lines. In this way a complete company could be loaded within 10 minutes; and, as many units found out later on, the system was admirably adapted for loading on to anything from jeeps to aeroplanes and landing craft.

By 1944 the demand for mules had outrun the supply and the replacements could not carry the full 80lb loads. Recourse was had to small ponies which could only take 40lbs on each side. In contrast the real aristocrats among mules were those of the Mountain Artillery; the biggest, the No 1 Gun Mule, could carry a single 400lb load, the piece of a mountain gun. They were rare and very expensive, being bred in Argentina; there was a time in 1943 when the gunners were told never, in any circumstances, to risk losing a gun mule!

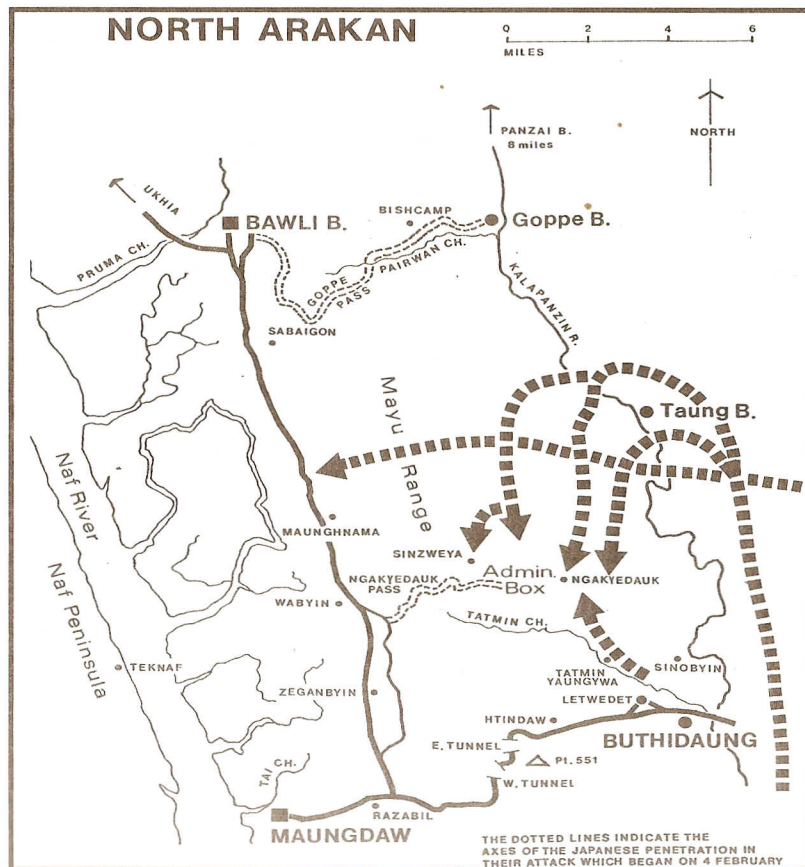
Great Men

The commander of 26 Ind Div was Maj Gen "Sonny" Lomax (The Welch Regiment). He visited units regularly and was known to everyone in the division; a man who really could inspire people; they knew he cared for them. The histories show that he handled very difficult situations calmly and with great skill, including the chaotic take-over from 14 Ind Div's unhappy campaign in 1942/43, and the capture of Hill 551 near the Buthidaung tunnels in 1944. It is very good to read that Field Marshal Slim goes out of his way in his great book *Defeat into Victory* to acknowledge General Lomax's quality. He was greatly missed when he left the division before the landing at Rangoon.

General Slim, as he then was, visited units in the division at least twice. Standing on the bonnet of a jeep, he would address hundreds of soldiers in English, Urdu or Gurkhali, with great effect. He imprinted the strength of his determination on everyone. Lord Mountbatten too spoke to large groups of soldiers with great effect and wit. As part of his act, he had acquired a smattering of Hindustani, which led him into difficulty when he spotted 28 Field Company's Havaladar Major, Ganpat Chowan. Seeing this fine looking man with the then

uncommon distinction of a pre-war Indian General Service medal ribbon Mountbatten, meaning to ask Ganpat's length of service said "kitni nafri hai? (how much number?)". He should have said "kitni naukri hai? (how much service?)". Ganpat rose superbly to the occasion. The one thing he did know was the parade state, and furthermore in English... "Two hundred forty five" he said proudly. "Jesus Christ" said Mountbatten, and went on his way.

Early in the 1943 monsoon the AA&QMG of 26 Ind Div came to an evening meeting at 16 Brigade HQ at Bawli. The lighting was dim, from hurricane lanterns, and the 28 Company representative could not see the visitor clearly; but he was struck by his precise, almost academic speech. He might have been an Oxford don. He was in fact Lt Col Cariappa, later India's first Field Marshal, and the first Indian to have been trained at Sandhurst. He had the endearing habit of collecting Indian sweetmeats, biris and the like, and dispensing them to soldiers whom he came across on his rounds. He was enormously popular.



CHRONOLOGICAL SUMMARY OF THE ARAKAN CAMPAIGNS

The First Campaign

Mid 42 to Dec 42

Dec 42

18 Mar 43

Mar/Apr 43

Monsoon 43

The Second Campaign

Oct/Nov 43

Dec 43/Jan 44

4 Feb 44

8 Feb 44

Early Feb 44

Mid-Feb 44

8 Mar 44

Late Mar/early Apr 44

May 44

The Third Campaign

Oct/Nov 44

12 Dec 44

26 Dec 44

Jan 45

Jan 45

21 Jan 45

25 Jan 45

26 Jan 45

16 Feb 45

March 45

Thereafter owing to the demands of the Meiktila-Mandalay battles, air supply for Arakan had to be drastically cut. 82 Div was ordered back to the coast, and 25 Div to Akyab.

Apr 45

2 May 45

14 Ind Div, under command of 15 Corps, in East Bengal
14 Div starts move towards Akyab, reaching within 10 miles of Foul Point

14 Div, strongly reinforced, makes final unsuccessful attack on Donbaik

26 Ind Div replaces 14 Div

26 Div holds line Bawli - Goppe - Taung
Japanese on the line Maungdaw - Buthidaung

26 Div to reserve

5 Ind Div to Arakan (west of Mayu Range)

7 Div to Arakan (east of Mayu Range)

81 (WA) Div to Kaladan Valley on air support

5 & 7 Divs advance to the Maungdaw-Buthidaung line

Ngakyedauk Pass opened for dry-weather tanks and medium artillery; Maungdaw captured; 7 Div, re-inforced with 9 Bde of 5 Div, prepares to take Buthidaung prior to assaulting Ledwedet

81(WA) Div advances down Kaladan Valley towards Paletwa and Kyauktaw

Japanese counter-attack, a right hook encircling 7 Div and the Admin Box, taking Taung

7 Div surrounded. Strong Japanese post on summit of Ngakyedauk Pass

26 Div arrives in Kalapanzin Valley

36 (British) Div arrives to the west of the Mayu Range

7 and 81 Divs wholly on air supply, and 26 and 5 partly

Japanese begin to pull back

81 Div takes Kyauktaw, but is pushed back later

15 Corps resumes its advance

5 Div withdraws after capturing Razabil, replaced by 25 Ind Div; 7 Div withdraws, replaced by 26 Div east of the Mayu Range

36 Div captures the Tunnels, then withdraws to reserve.

26 Div captures Point 551

Goppe Pass opened for dry-weather 3-tonners

15 Corps withdraws for the monsoon to the line Taung high ground west of Buthidaung-Tunnels-Maungdaw

26 Div withdraws for re-equipment & amphibious training

82 Div takes Buthidaung; 25 Div begins to move southward

25 Div reaches Foul Point

25 Div occupies Akyab unopposed

25 Div and Commando brigade capture Myebon Peninsula and then Kangaw

26 Div land on Ramree I, Japs eliminated by early March

81 Div takes Myohaung

Marines occupy Cheduba Island

Brigade of 26 Div lands at Ru-ywa

Another brigade of 26 Div lands at Letpan

Thereafter owing to the demands of the Meiktila-Mandalay battles, air supply for Arakan had to be drastically cut. 82 Div was ordered back to the coast, and 25 Div to Akyab.

26 Div mounts on Ramree I for seaborne assault on Rangoon

26 Div lands south of Rangoon. No opposition

Unit Accounts

26 Field Company

This account is taken from the War Diaries of 26 Company. A personal account by Maj Chartres Baillie follows the unit accounts.

26 Company was the first of the Bombay Sapper units raised during the war to go into operations. It had trained for desert warfare at Quetta. But in February 1942 it was entrained for Ranchi in Bihar, moving forward in April to Feni near Chittagong via Calcutta, Goalundo Ghat, Chandpur and Comilla. April was spent preparing defences, demolitions and water supply, and in training. In May the monsoon broke, the Feni River rose 15 feet and the bridge, on the point of being washed away, had to be dismantled. The monsoon passed in training, maintenance and preparation for operations in the forthcoming dry season, as part of 14 Ind Infantry Div.

In early October the company marched forward to Ramu, the stores going by ship to Cox's Bazaar. The first task was to establish a pack mule/light 15cwt road from Cox's via Ramkhapalong to Ramu, with a ferry at Bawli Bazaar; and Lt Oxley reconnoitred a road alignment from Bawli to Maungdaw and Buthidaung. There was exceptional rain from 3 November on, and Maj Thorpe recorded walking from Cox's to Ramu in "water 3ft deep, flowing at 4 knots". All bridges were washed out and ferries at Cox's and Ramu (FBE raft) were out of action. Repairs were complete within 2-3 weeks, and work began on a landing ghat at Cox's and on a beach route down the Naf Peninsula. There was much road work and, in late November, the company were presented with 5 chargers and 4 mules (but no saddles), although they had no experience of animal transport; to general relief they were withdrawn a few days later.

By mid-December 47 Indian Infantry Brigade was at Maungdaw and 26 Company took part in moving 494 Field Battery down the coast road to Teknaf, ferrying them thence to Maungdaw. By then the company too was at Maungdaw, moving to Indin at the end of the month. Work went on the Maungdaw to Buthidaung road, repairing damaged bridges, and on maintaining the beach road towards Foul Point, opposite Akyab. It was found possible to ford the minor "khals" (chaungs) for 4 hours at each low tide. A reinforcement draft arrived from Kirkee at the end of January, having taken 57 days en route.

January had begun with track work at Indin and the search for a track across the Mayu Range at Kodingauk. The jungle was dense and very difficult, and the terrain on the far side was impossibly steep. Capt Baillie recorded that he followed an elephant track along the ridge, and came to a point where the elephant had obviously sat on his bottom and slid about 200ft down to a track below. Early in January Maj Thorpe made a recce in a Bren carrier as far as Foul Point, and on 11 January he was considering the construction of an airfield at Indin.

By mid-January the company was concentrated on bridging; a 130ft trestle bridge north of Indin, a 110ft pile bridge north of Kodingauk and two small box girders (SBGs). Around this time one section assisted in the landing of Valentine tanks over the beach north of Kodingauk. Later in the day when Maj Thorpe visited Foul Point, the Japanese appeared at Donbaik and on 18 January 47 Brigade mounted an attack on it, with 26 Company in support. Enemy bombers were active, but were forced to fly higher when a LAA battery came into operation on 22 January. By 23 January 47 Brigade was held up, and was replaced by 55 Ind Infantry Brigade. The company's work was still mainly bridging, and replacing SBGs for use further south. When 55 Brigade's attack was held up, consideration was given to mining under Japanese positions, but given up when it was realized that it would take at least three weeks.

By mid-February most of the company was in defensive positions near 55 Brigade HQ. A further attempt to find a pack route from Indin across the Mayu Range was unsuccessful. Work continued on mule tracks and mine laying, and on 26 February 71 Indian Infantry Brigade (26 Ind Div) took over from 55 Brigade. One section of the company was sent to join 47 Indian Infantry Brigade on the east side of the Range. At the beginning of March one section was working on bridges to the south of Kodingauk, and the third was in support of 6 Infantry Brigade, a four-battalion formation from 2 British Div; by the 20th they too had been held up by the formidable Japanese defences. Around this time two bulldozers arrived - the first in the forward area - which greatly helped in road maintenance. On the 21st one sapper was killed and two wounded by shell fire.

On 28 March a major emergency developed. The supply route to 47 Brigade on the east of the Range had been cut and a pack route was most urgently needed from Pedana, between Indin and Sinoh, to get them out. Maj Thorpe reced the alignment and 26 Company less one section, plus two sections of 73 (Bengal) Field Company worked flat out on it. By 30 March it was suitable for "lightly loaded mules by moonlight" and 47 Brigade began to withdraw in some confusion.

Company HQ was at Kyaukpandu at the beginning of April, with two sections detached, at work on the track. On 3 April the next emergency arose; the enemy had cut the main road north of Indin. Company HQ went into all-round defence (24 rifles) and prepared to destroy documents etc; and there was a report of an attack on the two sections on the track. The Royal Scots of 6 Brigade, nearby, were in difficulty with only two options open: either to stay put, or to get to the beach to join HOPFORCE, an ad hoc group of units further up the coast. 47 Brigade, on the east side of the range, was expected to withdraw westwards, to get out of an increasingly untenable position and to join up with the Royal Scots. On 4 April Hav Mohammed Isa was shot by a picket of 1/7 Rajput, seemingly trigger-happy.

On 5 April Company HQ was still cut off from all three sections. Early next morning a British soldier, slightly hysterical, arrived at Company HQ saying HQ 6 Brigade had been over-run. Next day 14 Div ordered 6 Brigade to withdraw to HOPFORCE and 47 Brigade with all three sections of 26 Company to fight its way back to an assembly area at Gyindaw, 7 miles north of HOPFORCE.

By the afternoon 6 Brigade were streaming back along the beach, with artillery engaging the Japanese over open sights. Meanwhile the three sections of the company had joined up under Lt Oxley and were holding a defensive position at the mouth of the Indin-Singh pass, covering the withdrawal of 47 Brigade. Their orders had been to hold the position until 0900 on the 6th, but 47 Brigade did not appear. At 1100 there was a report that the enemy were astride the pass. Oxley held on until 1300, by which time he knew that 6 Brigade were withdrawing and that the coastal plain would soon be open to the Japanese. At 1330 he learnt that 47 Brigade had been cut off and was scattering back across the hills. He then marched from the mouth of the pass skirting Indin, already occupied by the enemy, to the south. He reached the beach under Japanese mortar and artillery fire (the latter falling into the sea) reaching HOPFORCE and Company HQ round 2200. He was later awarded a Military Cross.

On 7 April the company rested and checked equipment; not much had been lost. They were heartened by a visit from Colonel Cavendish, Commandant at Kirkee. Next day 4 Ind Infantry Brigade, fresh, arrived and the company worked on defences for the next few days. 6 Brigade withdrew on the 11th, and there was heavy shelling and machine-gun fire until the company was ordered to move back at dawn on the 13th. That afternoon Lt Blake, a BNCO and 20 sappers found their route back blocked, but made their way back by a detour, and with 25pdr artillery support. From 14 to 17 April the company was on the beach at Lambaguna. During this time 3/9 Gurkha Rifles contacted an enemy patrol nearby and called in a heavy attack by RAF aircraft; hundreds of vultures were later reported above the scene.

On 18 April 72 (KGVO) Field Company relieved 26 Company, which went north to re-form at Chittagong before moving to Ranchi on 29 April. There Capt Baillie assumed command and the company later moved to Hardwar, as part of a training division (see Chapter One).

The following are the names of officers appearing in the war diary:

Maj LA Thorpe
Capt C Baillie (Vice Capt A Lewis, who left in February 1942)
Lts D Oxley J McGavin BF Lane GF Page FE Blake DG Healey

The following honours are on record:

MC Lt TD Oxley
MiD Maj LA Thorpe, Lt J McGavin, Sub Wilayat Hussein Shah, Jem Kehar Singh

28 Field Company

This account is taken mainly from the unit's War Diaries and from consultation with Lt Col WW Branford, Maj CJ Bewlay and Mr ST Lawrence. There is a personal account by Mr Lawrence following the unit accounts.

28 Company was formed in 1941 and left Dighi on 26 February 1942, arriving at Kharagpur in Bengal on 4 March to join 26 Ind Div. It was first employed on the construction of defences and by May it was settled at Barrackpore, where it was inspected by the Duke of Gloucester on 18 June. By then the original subedars, Tara Singh and Mohammad Karim had left; Sub Fateh Ali took over on 20 May. Around this time Maj MEF Bell took over command.

There is a gap in the War Diaries until May 1943, when the company was at Buthidaung. According to Col Sandes's history, it seems to have moved to the Maungdaw area in December 1942 and to have worked on the main Bawli-Maungdaw road and on jetties at Maungdaw and Teknat; later it was on the road to Buthidaung and operating ferries there. On 4 May the Japanese straddled the Maungdaw-Buthidaung road, and the company joined the 36 Infantry Brigade keep in the Ledwedet area. Later it came out from there, having had to abandon a quarter of its equipment and half its vehicles.

The 1943 monsoon was spent at Bawli, with a section at Goppe. The main tasks were maintenance of the mule track to Goppe and ferrying at Bawli. A detachment of 12 sappers under Capt JH Clark took part in an abortive raid by the North Stafford Regiment on the Maungdaw-Buthidaung road in July. They were ambushed but, due to Capt Clark's very quick action, the sapper party extricated themselves without loss.

In September, as the monsoon was coming to its end, the company moved back to Mynamati near Comilla in Bengal for training and re-equipment. In the following January they were at Fenua near Chittagong and the emphasis in training was on defence. At the same time the company was tasked to produce a mock-up fuselage of a C47 aircraft, for air-loading practice; and Lt Bewlay carried out air-dropping trials at Agartala of fragile equipment such as pumps and charging sets. Then a detachment of nine Mahrattas under Lt Leigh-Mallory (son of the Everest climber) was sent for air transit training with 3/9 Gurkha Rifles. All this seemed puzzling at the time and it was cut short by the unexpected Japanese attack on 4 February 1944, which encircled 7 Ind Div and the Administrative Box at the east end of the Ngakyedauk Pass. The next day 26 Div was ordered forward. After the war the explanation of the puzzle became known. Wingate had been pressing for 26 Div to be flown into north Burma as part of his second campaign; it had been earmarked to land at Indaw. Maj Gen Lomax, the divisional commander, had expected a violent reaction from the Japanese, and so had put the emphasis on defence in training.

Leigh-Mallory's party was a last minute addition to Wingate's forces already training at Ranchi, and formed part of a sapper platoon in one of the 3/9 GR columns. They took off to fly in to Broadway (77 Brigade) on 9 March but Leigh-Mallory and his orderly were in a separate Brigade HQ glider which had to make a forced landing when only half-way out. The narrative of their seven day march back to the Chindwin is described in an appendix to Calvert's book *Prisoners of Hope*. Leigh Mallory rejoined his jawans some two weeks later, much to their relief. They were involved in the stronghold defence of Broadway, the establishment of the Blackpool block and the subsequent evacuation and march north with 111 Brigade. Then followed the remarkable river-borne operations to evacuate sick and wounded from Indawgyi Lake and Kamaing, described in September 1948 RE Journal article *Indawgyi* by Maj KM Robertson. By August the evacuation had been brought to a close. Leigh-Mallory and his party have the distinction of being the only Bombay Sappers to have played a part in the 1944 Chindits.

In late February 28 Company moved over the Ngakyedauk Pass, as 26 Div relieved 7 Div, with the Sikh Platoon under Lt Bewlay on mule pack detached to Goppe and thence to Taung Bazaar. It settled at Tatmin Chaung under command of 36 Brigade, manning an infantry position, and within a few weeks the Sikh Platoon rejoined the company. The main tasks were track maintenance, mines and booby traps. In early March Lt Bewlay made a reconnaissance to Point 1619, in the course of which Spr Dalip Singh was wounded; and on 11 April, during preparation for an attack on Point 551 Lt Beare and Spr Udham Singh were wounded.

On 11 May the company moved back to Ramu for re-equipment and training, with the Sikh Platoon again detached to Taung Bazaar in support of 4/5 Gurkha Rifles. In August Maj CH Cowan took over command from Maj Bell, and soon afterwards Sub Jagir Singh took over from Sub Fateh Ali. On 3 September the company moved on a light basis to Bishecamp, some two miles east of Goppe, with the tasks of repairing bridges damaged during the monsoon, and of opening the pass for light vehicles as soon as possible. From 7 to 12 October it was necessary to put Bishecamp into a state of defence, following a Japanese feint to the east and north of Goppe. On 3 November the Pass was handed over to 2 West African Field Company and 28 Company moved via Chittagong to Coconada for training in amphibious warfare, as part of 71 Infantry Brigade.

In early January 1945 it moved to Chittagong to prepare for a seaborne assault (Operation MATADOR) by 71 Brigade on Kyaukpyu at the north of Ramree Island. On 21 January the assault took place, with the landing craft having to sail only a mile or two to the beach. It was almost unopposed, but sadly Capt FE Henson was killed in the Administrative Area on the following night; Capt CJ Bewlay took over as 2IC. The operation was impressive, with many landing craft, alligators and DUKWs pouring on to the beach under the fire support of the battleship HMS *Queen Elizabeth* and with B29s of the strategic air force, bombing

likely strong points. The training at Coconada had been effective and in a different way, with the anti-aircraft cruiser HMS *Phoebe* in full operation against Japanese bombing attacks.

71 Brigade fought its way down the island towards Ramree Town, with the company fully extended on track construction, bridge repairs, diversions for tanks and mine lifting; the last-named included many 500lb RAF bombs topped with flat anti-tank mines, and large naval beach mines. In early February a major task was to force a track through 4 miles of hilly thick jungle, which proved too much for the only D6 bulldozer; tanks and even their guns were used to clear obstacles.

Shortly before Ramree Town was taken on 9 February, Lt Lawrence and his platoon were involved in a difficult action at a cross-roads not far short of the town. The Lincolns of 71 Brigade were held up by snipers and a bunker, and the platoon had to detect and clear mines using bayonet prodding. At one point Lawrence had to take cover behind a paddy bund until a tank came up, and he was glad to use its external phone to point it on to its target. An unusual feature of this operation was fire support from a frigate lying in the inland channel between Ramree Island and the mainland, so that its shells came over the enemy positions towards our own troops.

The company settled into Ramree Town on 11 February. The first task was the development of the Doratha jetty area for use for forward maintenance to support operations on the mainland against Taungup and the first LCT berthed there on 14 February. March passed in working at Doratha, making tracks and arranging water supply which became difficult as the weather became warmer. On 7 April the company concentrated at Minbyin on the west coast of Ramree Island, to prepare for a sea-borne assault on Rangoon (operation DRACULA). In late April it was loaded on to HMS *Persimmon*, an assault carrier with 16 LCAs, and the landing took place on 2 May. In that it proved to be virtually unopposed, it was similar to the Ramree operation; otherwise it was very different. The assault craft had to be dropped some 30 miles (7 hours' sailing) from the landing beaches, in a Force 6 wind; Field Marshal Slim recorded that there were doubts whether the smaller landing craft could manage it. In the event they did, and no one in the company was sea-sick - a tribute to the power of Marzine (or its predecessor) and chewing gum, issued liberally to everyone. It was a dramatic scene, with an armada of landing craft of all sorts, Mosquitos ground-strafting and Landing Crafts (Gun) in very noisy action. But, apart from a few at Elephant Point, there were no Japanese. About the only British casualties were the new CRE, Lt Col Ward and his IO, Lt Payne, who were killed when their LCT struck a sea mine off Elephant Point at the entrance to the Rangoon River.

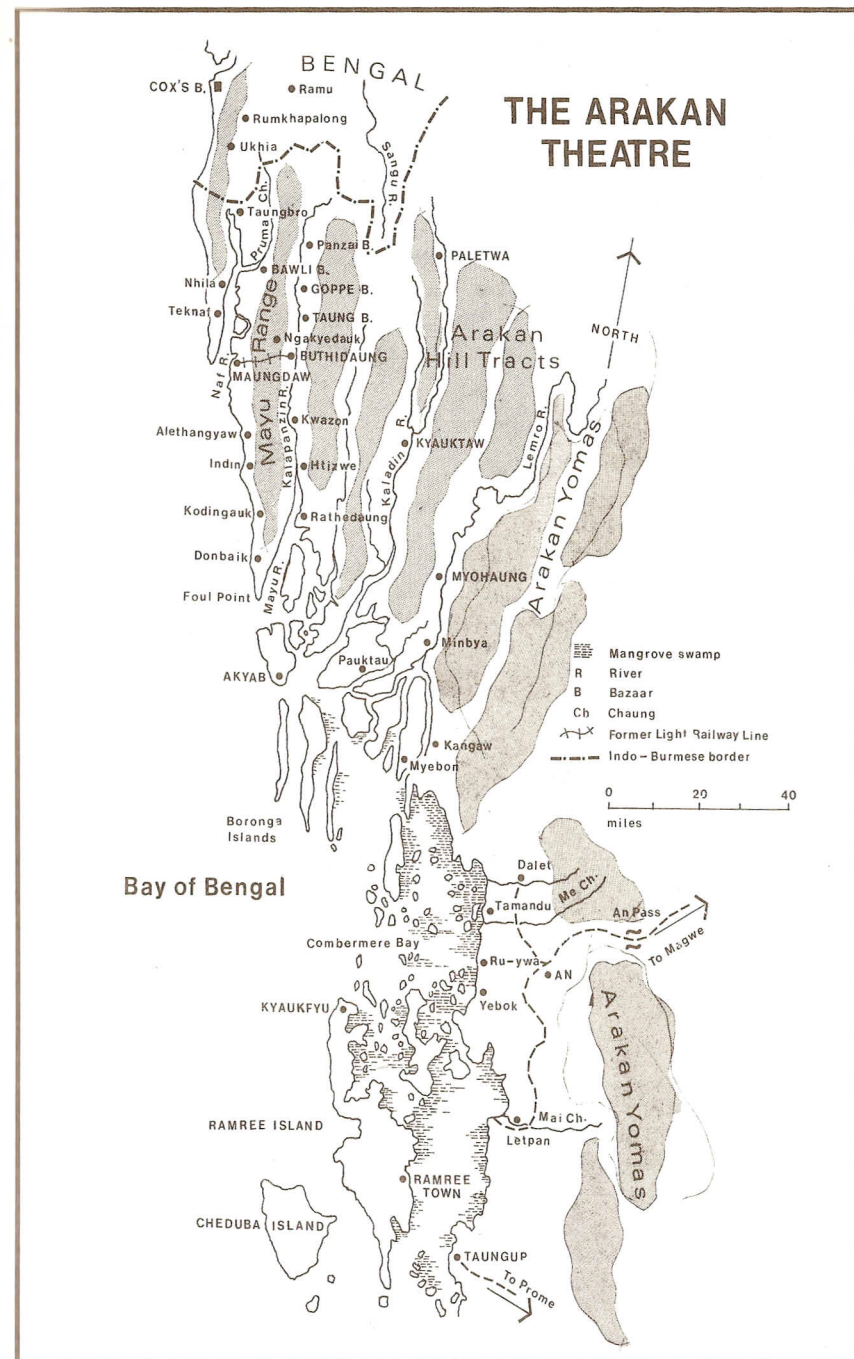
28 Company was to land in a wide tributary chaung on the east side of the main river and to get 25pdr guns on shore through steep flood banks. This had been carefully tried out beforehand, using explosives, and all went according to plan. On the second day 71 Brigade reconnoitred forward to Syriam opposite Rangoon and, on it being confirmed that the Japanese had left the city, made an impromptu crossing to it. One of the bulldozers, attached from 328 Field Park Company, was the first vehicle into it. The contrast of the Rangoon scene was staggering to a unit which for the past three years had been in east Bengal and Arakan. Although in a terrible mess, it was still a beautiful place with the magnificent Shwe Dagon pagoda predominant. The monsoon broke on 3 May, earlier than expected; a surreal touch was the first airdrop on the race course, in torrential rain, which consisted of.... jerricans of water!

There was plenty of work on ramps, hards, clearance and water supply. An unusual task, made possible by the approach by a former Burma Railways locomotive superintendent, was to get the one surviving locomotive under steam and to run it some 12 miles to Mingaladon airfield, where it bogged itself in a crater. Once re-railed, it came back in good order, and a daily service lifting supplies forward was set up.

A reconnaissance by light aircraft on 11 May provided the first visual link with 20 Ind Div, advancing south down the road from Prome. On 13 May Maj Cowan made a road reconnaissance to a demolished bridge at Myaungtanga, a few miles north of Mingaladon where by chance he met Lt Col Fowkes, CRE 17 Ind Div, who were advancing from Pegu. He was welcoming, but clearly not best pleased that 26 Div were the first into Rangoon.

On 15 May Maj Sheldon took over command and two days later the company moved to Taikkyi. Some Japanese bridging equipment was found, enough for three bridges. On 18 May there was call for urgent action at the Yobu reservoir, where the spillway was damaged and the main pipeline holed for 200 yards. By 26 May these had been got into working order, and an 80ft and a 40ft Bailey bridge had been built. Thereafter until 12 June the company worked on repairs of a washed-out diversion and of a number of buildings, and on a new transit camp.

26 Ind Div had captured Point 551 in the Mayu Range near Buthidaung on 3 May 1944. Later they were given to understand that they would be returning to India shortly for re-equipment and training, but instead they were told that they would have to do the Ramree landing and that thereafter they would certainly go back. Once the Ramree landing was over, one brigade was actually sailed back to Madras, marched round the town, and then sailed back to Ramree. This was not well received, particularly by an excellent and distinguished British battalion who made their views unmistakably clear to their new divisional commander, Maj Gen Lomax's successor; and there was a general feeling among the officers of the Indian units that their troops were not being fairly treated.



Early in April 1945 28 Company was required to provide airstrip facilities for no less than 15 light aircraft, all arriving about the same time. This turned out to be no less than a visit by the Supreme Allied Commander, Lord Louis Mountbatten and his staff. Perhaps in view of the feelings in the brigade that had made the return trip to Madras, he called its COs to a meeting and said he wanted everyone to know how this obvious change of plan had come about. The Japanese were already beaten, their navy and merchant marine sunk and their air force destroyed. It was only a matter of time. When their collapse came, it was essential that Singapore should not "fall into our hands, like a ripe plum, by courtesy of the Americans" (his words, verbatim). To this end we had to take Rangoon before the monsoon, due around 7 May. It was uncertain whether General Slim would be able to achieve this from the north and an immediate sea-borne assault was therefore necessary. 26 Div was the only formation available, and furthermore they were amphibious-trained. So it was for them to take Rangoon. The effect was immediate. Everyone said that if only they had been told this long before, things would have been much easier. (An afterthought - did Mountbatten know at the time of the atom bomb?)

The following are the names of officers appearing in the War Diaries:

Majs	HM Millar, MEF Bell, CH Cowan, WL Sheldon
Cpts	Mallinder, JH Clark, WW Branford, FE Henson, CJ Bewlay
Lts	DRY Gibson, M Donally, OW Moore H Martyn-David, J Leigh-Mallory, AGC Hannaford, G Narayan, EH Beare, RH Pitts, FH Lane, CW Deniss, ST Lawrence, DJ Ward, SK Bodkin, D Macey, A Hope, CKG Smith, DRD Hyslop

The following honours are on record:

MiD	Majs HM Millar & MEF Bell	Cpts JH Clark & CJ Bewlay
	Lt EH Beare	Jem Kartar Singh
	Nks Rehmat Ali & Gurdial Singh	
	Sprs Khushi Mohammad & Abdul Khaliq	

Capt JH Clark went on to win an MC and Bar when commanding 92 Field Company in the Imphal and central Burma operations in 1944 and 1945.

The Mahratta Platoon Hav RR Rane was subsequently commissioned and as a 2Lt was awarded the PVC serving with 37 Assault Field Company in Kashmir in April 1948.

98 Field Company

This account is taken mainly from the unit's War Diaries and from consultation with Mr Elbourne; and with Messrs Whiteley and Moss, whose personal accounts follow the unit accounts. The company was formed up at Dighi in 1942 under the command of Maj NH Thomas. The other original officers and VCOs were:

Capt	WS Say-Ludlow	Sub Ganpat Chowan
PM Sec	2Lt JR Moss	Jem Baqr Khan
Mahratta Sec	2Lt PD Whiteley	Jem Rajam Scinde
Sikh Sec	2Lt DS Elbourne	Jem Bhagwan Singh
Rft Offr	2Lt I McEwen	

Maj BP Tyrwhitt-Drake took over command shortly before the company left Dighi on 2 April 1943, arriving at Chittagong on 27 April. By 10 May two sections were at Maungdaw backloading stores, with the company based at Ukha. The next weeks were spent on the stores, repairs to jetties and road works. On 18 May the unit consolidated at Bawli prior to marching over the formidable Goppe Pass, and settling on the Pairwan Chaung, three miles west of Goppe. Their task, to open the pass to mule traffic during the monsoon, was achieved by 7 June, using large numbers of coolies; the peak total was 714. In early June Lt Elbourne's Sikh section built an 80ft suspension bridge over the Pairwan Chaung, said to be designed "for mules at 80ft centres". It was successful and Elbourne and his Sikhs were left behind to build a similar bridge on the western side of the pass. Both bridges remained open through the monsoon, keeping the pass open for foot and mule traffic; a credit to its builders and to the advice in the RE Pocket Book!

In early June the company less the Sikh section, much depleted as a result of monsoon weather without cover and of inadequate anti-malarial provision, moved to Bawli. By early July the whole unit was settled in the Cox's Bazaar-Ramu area working on road and bridge repairs, and on a hospital on the island at Cox's. In August, with the monsoon still at its height, work shifted to the Tumburu-Bawli road, laying brushwood fascines and bamboo mats, again with large numbers of coolies - up to 600 who at one stage went on strike. On 9 September Maj Tyrwhitt-Drake got a 15cwt truck through to Bawli by dint of much pushing and unloading.

In late September the company, again up to strength as men returned from hospitals as far away as India, was located at Chittagong, maintaining the Karnaphuli bridge and repairing several others, in some of which piling was difficult. Lt Elbourne was ordered to undertake an engineer reconnaissance to find a route from Cox's Bazaar via Chiringa to the Kaladan River. He left Cox's on 28 September with Nk Achhar Singh and five jawans and reached the Kaladan on October 9. Returning via a more northern route, he was struck down by meningitis and was successfully brought back by bamboo raft and dug-out canoe by Nk Achhar Singh. The Sikh section was then taken over by Lt McEwen.

In late October the company moved to Hathazari for intensive training until the end of December, and then moved to Fenua where they spent January 1944 on road work and further training. Lt Moss was ordered in January to take LHav Alif Din and part of his PM section to make the Sangu River navigable for small craft from the Kaladan watershed by clearing it with explosives. He set forth in dugout canoes with half a ton of explosives. A Gurkha standing patrol was available for support. Before the task was completed he was ordered back to take over as 2IC of the company. But on his return he was immediately posted, via Kirkee, to 26 Company, and so never effectively assumed the appointment in 98 Company.

Following the surprise Japanese attack in Arakan on 4 February, the company moved south with 26 Ind Div at very short notice, arriving at Bawli on 9 February, to form part of the 36 Brigade firm base. Throughout the month work continued on tracks and booby-traps - lifting, laying and de-lousing - and the company held an infantry position, with occasional disturbances from Japanese patrols. In March they moved over the Mayu Range to Badana, near Buthidaung, again in an infantry position and tasked with track maintenance, mine sweeping and laying booby traps. On 12 March there were Japanese on the perimeter - much shooting, but nothing to show for it.

In April work continued on track maintenance, mine warfare and demolishing blockhouses at Buthidaung. Lt Whiteley was involved in making a dummy tank crossing over the Kalapanzin River. While he was in the "bridgehead", there was a Japanese attack in which they lost three killed and three wounded, while the infantry escort lost one killed and one wounded. There was no sapper casualty.

On 16 April Maj L Lubett assumed command. Work continued on bridge repairs, water points and track maintenance, and also on the recovery of folding boat equipment abandoned at the end of the previous year's campaign. It was recorded with some satisfaction that the average jeep speed on the Goppe to Ngakyedauk Pass track was 12mph.

With the monsoon breaking in early May, the company went into basha accommodation at Bawli which Maj Lubett thought inadequate, fearing that sickness might reduce the unit's strength by a third. Work went on throughout the monsoon on the Goppe track, animal shelters and defences at Taung. On 27 June it was noted that the aerial ropeway over the eastern part of the pass (not a responsibility of the company) should be ready to run as soon as buckets arrived, and in July Maj Lubett travelled along its whole length (some three miles) in 25 minutes; he was luckier than the local Civil Administrator who got stranded in mid-passage (see the Suspension of the Civil Power).

At the beginning of September 98 Company was established at Goppe with a platoon at Taung; the tasks were to make a road between these two bazaars, to build a Class 12 crossing of the Pairwan Chaung and to operate ferries on the Kalapanzin River.

On 6 October the Japanese made a feint attack to the east and north of Goppe. That morning Capt Whiteley, Jem Abdul Aziz and five sappers had left there to reconnoitre a route to Panzai Bazaar, ten miles to the north. But at Kanbu, a mile north of Goppe, they ran into a force of some 80 Japanese and LNK Maula Baksh was wounded. Whiteley sent the jemadar and two sappers down the Kalapanzin to fetch a sampan to evacuate the wounded man, but they were cut off. Meanwhile he lay up in a nullah with the rest of the party. At 1000 the wounded man died. Later the party withdrew along the river, and came into an

ambush. In the ensuing exchange of fire two Japanese and Spr Dadan Khan were killed and one sapper was wounded. Whiteley was an excellent marksman. The party laid up again for the night and Whiteley got back to a British unit at 0500 the next day. The remainder of the party came in one by one and the Green Howards recovered the wounded sapper later in the morning.

The same tasks went on in October and November, including preparations in early October to ferry 25pdr guns down the Kalapanzin to Taung. General Slim visited the company on 13 October and Maj GS Homewood took over command on 28 October.

At the beginning of December 98 Company moved to Colaba near Chittagong for rest and training, and one platoon was attached to 28 Field Company at Coconada for amphibious training. The main body of the company left via Chittagong in mid-January 1945 to arrive at Kyaukpyu on Ramree Island on 21 January, and set to work on communications and water supply in the Administrative Area. Lt McEwen and his platoon came back from Coconada on 26 January and went on to take part in a minor landing by Royal Marines on Cheduba Island, to the south-west of Ramree.

February passed in the construction of roads and airstrips and in exploding Japanese beach mines which had been laid in large numbers along the beach route to the south of the island. At the end of the month the company moved to Myinbin on the west coast of Ramree and spent March and early April maintaining the 38 mile line of communication along the island. On 13 April they began to train for the Rangoon landing (operation DRACULA) and embarked on the 28th at Kyaukpyu as part of 36 Infantry Brigade. The landing was to be on the west bank of the Rangoon River, and the company tasks were to provide hards and ramps, a light aircraft strip and a fighter strip; and to deal with mines. The landing took place on 2 May and by the 4th the company was in Rangoon working on dock and street clearance. On 28 May they embarked on HT *Nevasa* for India.

The names of the officers mentioned in the War Diaries are:

Majs	BP Tyrhitt-Drake, L Lubett, GS Homewood
Cpts	II Williams, PF Whiteley
Lts	JR Moss, D Elbourne, I McEwen, FL Evans, RH Fitt

The following honours are on record:

BEM	Spr Ajmer Singh
MiD	Maj GS Homewood, Lt I McEwen, Sub Ganpat Chowan, Jem Bhagwan Singh, Spr Arjan Jadhav

24 Engineer Battalion

This account is taken from the unit's War Diaries and that of CRE 7 Div for 1944. Sadly, it was not possible in 1996 to make touch with any survivor of this battalion, which was closely involved in the battle of Ngakyedauk.

24 Engineer Battalion was the only unit of its kind raised by the RBS&M. It left Kirkee for east Bengal on 13 December 1943 at a strength of 12 British Officers, 22 VCOs and 900 IORs. The CO was Lt Col RA Bishop and the Sub Maj Shah Jehan. It arrived at Chittagong on 27 December and was in camp at Bawli on the 31st.

By 20 January 1944 the whole battalion was across the Ngakyedauk Pass under command of CRE 7 Ind Div, with the tasks of following up the division's field companies as an engineer reserve, maintaining the Pass and adjacent tracks, ready to act as infantry in emergency. In late January B Company was escorting mule convoys, and C Company was under command of 7/2 Punjab Regiment, employed as infantry; they had 6 IORs wounded in vehicle ambushes.

When the surprise Japanese attack began on 4 February, the battalion was immediately involved. On that day Battalion HQ and a section of C Company was based at Laung Chaung, near HQ 7 Div; A Company was working on the Pass; and B Company was at Tatminyaungywa under command of 89 Brigade in an infantry role to the east of what was to become known as the "Admin Box". The remainder of C Company was under command of 20 Field Company on track maintenance. D Company was near Laung Chaung on track work and the protection of 7 Div HQ from the north. In the morning the section of C Company with Battalion HQ, under Nk Harchand Singh, had gone north to Taung with three sampans of equipment and stores to work on a landing ground. But while unloading at the Taung jetty they were challenged by Japanese, who had occupied the village during the night. Harchand Singh opened fire and withdrew to Battalion HQ, claiming three enemy casualties.

On the evening of 5 February the remainder of C Company was detached to protect 7 Ind Field Regiment, with whom they remained until 1 March, cut off from 7 Div. They sustained several Japanese attacks and undertook extensive patrolling; They had no casualties, but killed a Japanese officer, and took his sword.

At 0500 on 6 February a heavy attack developed on HQ 7 Div from the north. The brunt fell on D Company, who held their positions until 1200, with severe casualties: killed - Capt WA Street, Lt WAA Gibbons and 7 IORs; wounded - Jem Narayan Golande and 15 IORs; missing - 23 IORs, of whom 6 escaped from the Japanese and rejoined on 7 February. At 1200 HQ 7 Div withdrew in disorder to the Admin Box and the GOC ordered D Company to concentrate there. They provided his escort to the Box.

Meanwhile Battalion HQ and the section of C Company were resisting an attack some 400yds to the south. They received no advice of the move of HQ 7 Division. At 1330 the Adjutant (Capt Arden), being unable to reach the original Division GSO1 to withdraw at once and to join A Company, which was thought still to be working on the Pass. Battalion HQ reached the Admin Box at 1830, having had the following casualties: killed - 3 IORs; wounded - Lt Col Bishop (at the time officiating CRE at Division HQ) and 1 IOR; missing - 2 IORs. Nearly all the vehicles got to the Admin Box under Jem Dinker Ghargle and, as the Pass was blocked to vehicles, remained there with the drivers acting as infantry until 24 February.

In the evening of 7 February Battalion HQ and D Company under Maj Briggs marched from the Admin Box, reaching the western end of the Pass at 2130. They had found A Company's camp, half-way through the Pass, to be empty; that company was actually manning an infantry position near the top of the Pass. Briggs was however advised by a Provost NCO that A Company had moved to the 5 Div Box at the West end of the Pass, and decided to go there. Shortly afterwards OC A Company learnt of this move and joined up with Battalion HQ and D Company.

From then on Battalion HQ, A and D Companies, and the section of C Company remained at the west end of the Pass, under command of 5 Div. They were used as infantry to hold positions to support the re-opening of the Pass, under command of 2/1 Punjab until 11 February, and then until the end of the battle on 27 February under command of 123 Brigade. During this time one IOR was killed, and Sub Laxman Katkar and 8 IORs were wounded.

B Company remained in its position at Tatminyaungywa until early March. It was under command of 89 Brigade, but about a quarter of a mile outside its perimeter. Contact was maintained by patrols and rations were sent out in Bren gun carriers. The company was never directly attacked, but enemy mule convoys often passed within 300 to 400 yards. During the battle they captured six Japanese, and recovered six bodies and two swords. Their own losses were three IOR killed, and three wounded.

When Lt Col Hugh Salberg joined the battalion to command B Company after the war, the company had a blue flag with a white "B" sewn on it, which they raised and lowered with a simple ceremony daily. The flag had been presented to them by the GOC 7 Div after the Ngakyedauk Pass battle. The story was that the company had been involved in the defence of the divisional HQ but researches of all the war diaries show that the company was throughout the battle at Tatminyaungywa 3½ miles to the south-east of 7 Div HQ. However there is a special note (possibly written by the GOC himself) at the end of his HQ War Diary for February 1944 giving credit to the individual brigades for their part in the battle and singling out B Company for special praise. "Throughout the month a company of 24 Engineer Battalion remained at

Tatminyauungywa village. They did great work and were most useful as a rendezvous for small parties which had to pass between Admin Base, 33 Brigade or 9 Brigade." It seems reasonable to infer that B Company were awarded the flag by the general for its good work at Tatminyauungwa and perhaps for sheltering him some time during the three-week battle.

The sitrep by CRE 5 Div on 25 February is significant: "24 Engineer Battalion has still the primary role of the protection of the west end of the Ngakyedauk Pass, which they have done effectively despite great administrative difficulties and their low scale of automatic weapons, which is quite inadequate for a prolonged infantry role. I expect to have them relieved of infantry duties in a day or two".

On 28 February all parts of the battalion at the west end of the Pass rejoined Battalion HQ at Wabyin, C Company rejoined the next day, and on 3 March the whole unit moved to Bawli to work under CRE 15 Corps Troops Engineers on the Goppe Pass. B and C Companies had been out of touch with Battalion HQ from 4 February until the end of the month. The total casualties during the battle were:

Killed:	Capt Street, Lt Gibbons, 14 IOR
Wounded:	Lt Col Bishop, Sub Laxman Katkar, Jem Narayan Golande, 33 IORs
Missing	19 IORs

Lt Col Bishop returned to the battalion on 25 March and it continued to work on the Goppe Pass until 22 May, when it moved to maintain the Ukhia-Tumbru-Teknaf road. On 7 August it began a sea-borne journey to Coconada, via Cox's Bazaar and Chittagong, for training in air loading and airfield construction. On 19 December it left Coconada by train en route to Dimapur in Assam.

The names of the officers mentioned in the War Diaries are:

Lt Col	RA Bishop (Maj DCS David and Lt Col HM Millar temporary replacements)
Maj	EL Briggs
Cpts	ARD Arden, BL Smith, DS Wilson, WM Scott, PF Cooke, IE Lloyd, WA Street
Lts	Grimshaw, RC Davis, Gibbons, Pellatt (QM), AB Yates, J Gray, JG Caperwell, Lang (QM)

The following honours are on record, not all of which will have been won in Arakan:

MC	Capt DS Wilson
MiD	Lt Col RA Bishop
	Subs Maj Shah Jehan Khan, Bostan Khan, Hari Powar
	Jems Diwan Singh, Fazal Haq, Naranjan Singh,
	Atmaran Tate, Ghulam Sarwar
	Hav Anna Adsule
	Nk Shahu Baber
	Sprgs Sakaram Sawant, Vital Scinde, Jumma Khan

483 Field Company

This account is taken mainly from the company's War Diaries after consultation with Col SH Clark and Mr G Atkinson. The personal account of Col Clark follows the unit accounts.

483 Company left Kirkee on 21 June 1943, arriving at Feni in east Bengal in July. They went to work at once on the major airfield there. The OC was Maj EM Hall and the Sub Jagir Singh. There was much work, which continued until October on HAA gun emplacements, culverts, cannon stop-butts, bomb shelters and dispersal pens.

On 24 October the company was ordered forward to come under the command of 26 Ind Div and by 8 November it had arrived at Rangamati. Here the tasks were road maintenance, improving the track to Lungleh and the jetty at Rangamati. These continued until the end of December, with growing emphasis on water supply and well-digging at Dhobi Ghat. In late December they moved to North Bawli and work began on a considerable programme of bridge building, held up at first by very heavy rain and difficulties in piling. In mid-January a 60ft bridge was completed and a section was detached to Maungdaw. On 21 January responsibility was taken over from the Malerkotla Field Company for the high-level bridge at Bawli and soon after two Class 12 bridges on the Bawli to Maungdaw road were upgraded to Class 30.

Work continued on bridges and piling until the Japanese attack developed on 4 February. By the 6th two sections were in defensive positions at Maungdaw. There was some interference by Japanese patrols including on 10 February a false alarm of a landing at Maungdaw, which led to a panic in a nearby Pioneer unit. By the 10th the company was back at work up-grading the main Bawli to Ngakyedauk road to Class 24, while still holding defensive positions. On the 21st the OC visited the top of the Ngakyedauk Pass and saw 5.5 inch guns being positioned to fire point-blank on Japanese bunkers.

By 22 February it was possible to get some training done, and on the 26th the company moved to south-east Bawli to work on a jeep track across the Mayu Range. By 1 March they had made a good start on the track. Maj Hall noted that they had dug at a rate of 160 to 170 cub ft per man-day, including roots and trees. But no sooner had they made this good start than they were moved on 4 March to Wabyin at the western end of the Ngakyedauk Pass, to concentrate on bridging and piling for the rest of the month. On 20 March Lt Davis did a preliminary survey for the Goppe Pass ropeway, and on the night of 26 March there was a sharp engagement when the Japanese got inside the wire perimeter. 273 rounds were fired, and more by the nearby Beach Field Company.

At the beginning of April the company moved to the Pairwan Chaung at the eastern foot of the Goppe Pass, tasked to build a 15cwt track to Goppe. There

was much difficulty in cutting down trees for piles and on 20 April it was necessary to send cut road-bearers from Bawli over a 40-mile detour to Goppe via the Ngakyedauk Pass. There were problems with contractors and the transport of timber on 4x2 15cwt trucks was very difficult. By early May 300ft of bridging had been completed in 28 working days. Work then shifted to making and laying brushwood fascines and on 22 May the company moved North to Ramkhapalong. Training began, with some work on road maintenance and quarrying. Sub•Jagir Singh left to join 28 Field Company on 18 May, being succeeded by Mohammad Azam.

On 8 June the British officers went to a solo performance by Noel Coward and were elevated, no doubt, by hearing "*Mad Dogs and Englishmen*" sung in a vast basha in a monsoon rain storm. As the monsoon took hold, the company were tasked with a major bridge reconstruction at Idgaon and the provision of a ferry. The bridge involved piling and preparation for a 140ft DS Bailey bridge, which was completed on 30 June.

On 8 July the company moved to Bawli to monitor and repair the Kyrreny bridge and others which were under threat from the monsoon floods. This kept them busy through July and August, with some training and men going on leave in August and September. In October and early November they were stripping jetties, piling and doing odd jobs in the Maungdaw area including reconnoitring a tank route to the east of the Mayu Range and other routes southwards. Around 11 October there was a warning of Japanese in the area and the company took up a defensive position for a short time. In mid-November most of the unit was in the Tunnels area, and by the 18th three miles of the road had been tested to fair weather Class 30. Over the next three weeks there was a mass of bridging: a 110ft TS Bailey bridge, a 140ft DS Bailey Bridge and four RSJ bridges. Maj Hall described some of the gaps as "enormous chasms". Much blasting was involved. In the first week in December two 32ft stock spans, a 65ft plate girder and a three-span (23/45/23ft) bridge were built. Work then switched to enclosing a cemetery and laying Bithess on the road.

By 20 December the company had moved to north of Ramkhapalong for rest and training until January 1945. There followed work on bridges and culverts on the coast road southwards to Foul Point, whence they made an awkward landing on Akyab Island on 19 January. Around this time Maj JA Westwood took over command from Major Hall. The company remained on Akyab until early June, working on a wide range of LofC tasks: in January and February clearing a site for an Ordnance Depot, road construction and clearance and repairs to houses. In March and April work was on roads and culverts, on a POL depot and a butchery, and on demolishing houses to recover bricks. On 13 April the OC noted with some relief that the Sikh platoon had consented to eat female goats on the Basarka holiday. On 29 April the OC and Capt Bradbury flew on an air-drop mission to Pegu, in southern Burma over 200 miles to the south-east.

The monsoon broke in early May bringing more work on road repairs, culverts and drainage. There were also tasks to build plinths for workshops and a hospital. On 5 June the company sailed from Akyab, arriving in Madras on the 10th and Coimbatore on the 14th. The company were to prepare and re-equip at Coimbatore and were actually under embarkation orders when the atom bombs were dropped in early August. Disbandment followed on 10 December 1945.

The names of officers mentioned in the War Diaries are:

Majs	EM Hall, JA Westwood
Cpts	FWW Wyatt, WJA Bradbury
Lts	NO Kendal, SH Clark, JS Davis, CW Deniss, RG Atkinson

The following honours are on record:

MBE	Maj EM Hall, Sub Jagir Singh
MiD	Lts SH Clark, WJA Brabbury
	Jems Sardar Khan, Sajjanrao Scinde
	Hav Raghu Powar, Nk Rostam Khan,
	Spr Mohammad Alam

328 Field Park Company

This account is taken mainly from the unit's war diaries and from the recollections of Majs KH Lambert, GW Launder and Capt DH Stanley, who served with the company from December 1942 to June 1946.

328 Company left Dighi on 18 April 1943, to join 26 Ind Div in east Bengal and Arakan. The OC was Maj TP Kidman and the Sub Jijiba Bhosle. The Field Section included a mechanical equipment sub-section with three D4 Caterpillar bulldozers and two D6s. The company arrived at Chittagong on 1 May and Cox's Bazaar, by boat, on 8 May; the vehicles arrived on 26 May. It is recorded that on 16 May a tiger visited the camp. The first tasks were back-loading stores from the previous season's campaign, and ferrying back sick soldiers. The Stores Section was sent to Maungdaw under CSM Spruce in early May. Cut off by the Japanese, they escaped by Fleming Lifeboat (hand-propelled) to Bawli Bazaar and later set up at Tumbru.

The rest of the company remained well established at Cox's Bazaar throughout the monsoon, occupied with the usual wide range of field park tasks including repair of bridging equipment, electric lighting, delivery of mail by boat, and making all sorts of signs, spikes, dogs and drift bolts. A particular task was battery charging on a large scale for the RAF, Signal and AA units, and a nearby hospital.

At the end of September they went back to Chittagong and spent the next three months training. Maj KH Lambert assumed command in early January 1944. On 16 February they moved to Bawli Bazaar, with company HQ and plant going on to Sinzweya. Particular tasks were making bamboo fascines, stirrup bolts, and overland water supply lines. On 25 March there was an alarm

that some 100 Japanese were nearby, but nothing developed. As the dry weather progressed, emphasis increased on water supply, and the Workshop Section was in full swing mass-producing dogs, spikes, fly traps, lavatory seats, signs of all sorts and trailers; an odd task was the making of frames to carry assault boats on 15cwt 4x4 trucks. The Plant Sub-section was concentrated on the Goppe Pass, and the Field Section employed on road work near Sinzweya. At all times the mechanical equipment had to move from one task to another on its own tracks; no transporters were available - even if their use had been possible. The machinery was only kept in use by most intensive efforts by all concerned.

At the beginning of the monsoon the company moved back to Ukhia and remained there until November, when it moved to the Cox's Bazaar area for training in amphibious operations. They excavated and lined a trench which was then filled with water to train drivers from all units how to drive their vehicles through several feet of water with their engines (and their feet) immersed.

By the end of December preparations were in hand for the landing on Ramree Island (Operation MATADOR) and the 2IC, Capt Launder, had the considerable task of sorting out the engineer stores, and the sequence of their landing, which were being loaded at Calcutta and Chittagong. On 31 January 1945 the company sailed from Chittagong and established itself at Kyaukpyu. Most of the Field Section had been deployed previously in the original landing on D Day (22 January), with the divisional field companies. All parts of the company were fully employed as Kyaupyu was developed as a base for air support of operations on the mainland of Burma. By mid-February it was possible to deliver stores to Ramree Town at the other end of the island by LCT. On 13 March the Field Section with its D4s landed in support of 72 (Bengal) Field Company on the mainland at Taungup for the continuing advance southward. Their tasks were similar to those on Ramree eg beach-head work, tank support (cutting chaung banks etc); light aircraft strips in paddy; road and track improvement and, on one occasion, bomb disposal.

Initially an important task on Ramree had been to keep the grass runway fit for use by Dakotas and Spitfires; later a pierced steel plank runway was laid by an airfield construction unit. 328 Company received its first consignment of Bailey Bridging, and had much cleaning and preparation to do, as the pins had been covered with anti-corrosion paint. The 26 Ind Div War Memorial was designed and built by a small party sent back to Hill 551, near Buthidaung. In late March or April the RBS&M Band played at Kyaukpyu, to the great enjoyment of all three Services.

The company provided a planning camp for the detailed working out of future operations along the west coast of Burma and for the landing at Ramgoon (Operation Dracula). As the fleet of landing craft built up, it was found that some had defective pumps, and the company provided individual sappers with water supply pumping sets to supplement them. The Field Section and most of

the Plant Sub-Section took part in the landing; they quickly made a light aircraft strip, and one of their bulldozers was the first vehicle to land in Rangoon on 3 May. The intention had been for the remainder of the company to follow on to Rangoon, but it was decided on 5 May that this should be cancelled and, instead, they sailed for Madras on 9 May. On 7 May a sapper, returning from leave, was only able to get to Kaukpyu by stowing away on a ship, which he did successfully.

The company consolidated at Vadigenhalli, north of Bangalore and began to equip and train for the landings on Malaya (Operation Zipper). Maj Launder assumed command in early July. Following the Japanese surrender in early August, their destination was switched to Sumatra, whither they embarked in Madras at the end of September. A highlight of their time at Vadigenhalli was the inspection of 26 Ind Div by General Sir Claude Auchinleck, CinC India on 3 September.

The officers noted as having served in the company are:

Majs	TP Kidman, KH Lambert, GW Launder
Cpts	DHT Hanbury, JK Wren, DH Stanley
Lts	AL Fookes, RL Anand, RF De Waal, SK Bodkin

The following honours are on record:

MiD	Lt DH Stanley Havs Mehrban Khan, Dattu Laynappa Mahasager, Nks Sohan Singh, Mahadu Yadaw
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403 Field Park Company

This account is taken mainly from the War Diaries of the unit after consultation with Maj Carter and with Colonel Harrison, whose personal account is included with the other personal accounts.

403 Company began life as 403 Field Park Squadron, raised in Dighi in the second half of 1942. At the end of that year it moved to Secunderabad to join 43 Ind Armoured Div. But when, in 1943, this division was broken up into independent armoured brigades, the unit became 403 Field Park Company and moved to Ranchi in March/April to form part of 15 Corps Troops Engineers, who were forming up. The OC was Maj WG Carter and the Sub Shankar Fadarti.

The main body of the company arrived in Ramu in east Bengal on 10 September and was employed initially in setting up and supporting HQ 15 Indian Corps. Thereafter they had three main tasks: field works including bridge building with local timber, and connected road works; water supply and engineer stores; and workshop operations including the electric lighting of 15 Corps HQ. By mid-November the plant section was complete. Early tasks were experiments with batwing rafts to carry tanks, and pile-driving trials; a system was devised with the pile-driving frame mounted on two steel girders which were cantilevered out from the bank or from that part of the bridge which had already been built. This greatly reduced the problem of dealing with currents in tidal chaungs.

By early 1944 the company was near 15 Corps HQ at Bawli. Following the development of the Japanese attack on 4 February, they had a week of disturbed nights as enemy parties raided across the Mayu Range. On 13 February they moved to the North of the Pruma Chaung, to join Corps HQ again. Through March and April their work with Corps HQ continued. The Plant Section was at work on the Goppe Pass, and the Field Section on minor bridge construction. There were problems in April with the high tides polluting the Corps HQ water supply. Also in April the company undertook the repair of a steel-framed bridge on the east side of the tunnels on the Maungdaw-Buthidaung road, which had just been captured. This was a welding job which needed a truck with generator and welding equipment to be placed beside the bridge, which was well within sight of the Japanese forward troops. The company wondered what might happen but, to their surprise and relief, nothing transpired. Armoured units crossed the bridge soon after the work was finished.

In early May the company moved to a monsoon site at Rumkhapalong and continued with their usual tasks. In June a proposed MT training ground had to be abandoned as an unacceptable malarial risk. It was known that in some places the deadly cerebral malaria was endemic. On 3 May Maj RS Hawkins assumed command and the company began to accumulate materials for the next season's operations, including about 1000 tons of timber. On 14 November Capt WCS Harrison took over as OC and in the following month training and preparations began for the forthcoming amphibious operations down the west coast of Burma.

In early January 1945 the company began to concentrate at Dohazari near Chittagong, prior to embarkation. On 18/20 January they sailed to Akyab, where they established an engineer stores depot. Their usual tasks continued until the end of April including hard standings, repairs to buildings and a major water supply system. An unusual commitment was to mass-produce stone hammers from power shafting found in an old rice mill. Maj JF Rusted assumed command on 8 January.

Following the success of the landing in Rangoon in early May, there was no need for the company to move forward and shortly afterwards it sailed back to India and Maj Harrison re-assumed command. It returned to Kirkee to disband.

The names of the officers mentioned in the War Diaries are:

Majs	W Carter, RS Hawkins, WCS Harrison, JF Rusted
Capt	KH Lambert
Lts	Bottger, RH Fitt, AR Jermyn, RG Atkinson

The following honours are on record:

MBE	Maj WG Carter
MiD	Hav Kondiram Sampal, Nk Abdul Ghafur

30 Field Company

This account is taken mainly from the unit's War Diary after consultation with David Young MC, whose personal account is included with the other personal accounts.

30 Company was formed at Dighi in January 1942. The OC was Maj JPA Jackson and the Sub Ghulam Rasul. In April 1942 they moved to Quetta, with a spell at Shelabagh and on the Quetta to Persia railway. In the following December they moved to Nowshera (NWFP) for training on the Attock River.

In May 1943 they moved to Marolo near Bombay for training in amphibious warfare on the beaches north of Bombay. Two months later they were at Khadakvasla near Poona for more amphibious training on the Lake and for some jungle warfare training south of Poona with 36 (British) Div. While at Khadakvasla Maj RL Swain took over command. On 11 February 1944 they left Khadakvasla for Calcutta, thence by sea to Chittagong (SS *Salama*), arriving at Cox's Bazaar on the 24th. By the 27th they were at Chota Maungnama, between Maungdaw and Razabil and work began on mule tracks, DUKW ramps, water points and light aircraft strips.

By the last week in March, 36 Div was preparing to attack the Tunnels area on the track of the former Maungdaw to Buthidaung railway line. Maj Swain made an air reconnaissance on the 24th and noted the bridge immediately to the west of the first tunnel was missing. 72 Brigade took up positions in the chaung leading to this broken bridge and on the bamboo-covered hills on each side of the chaung. 3 Section of the company was attached to the brigade to provide the mule tracks to the hills occupied by the brigade, and water supply for the units involved. Lt Young was taken in a tank of 25 Dragoons up to the broken bridge to try to estimate the size of bridge needed for its repair. He estimated that a 48ft box girder should cover the gap; it was ordered, arriving in the area on the 26th.

By first light on the 27th 72 Brigade began the attack to capture the Western Tunnel, which meant occupying the hill through which the tunnel ran. This hill had been subjected to heavy shelling to try to dislodge the Japanese who had well-placed defence posts to prevent any attack. By the time 72 Brigade started their attack the hill was virtually bare of all trees, but the Japanese were still in their positions. By the afternoon of the 27th the Royal Sussex had occupied the hill and had begun to dig in. During the evening of the 27th and at dawn on the 28th the Japanese tried to recapture the hill, but were beaten off.

Hav Santokh Singh, who had gone forward with B Company of the Royal Sussex, got a sight of the bridge area and confirmed the size of the gap to be filled. When darkness fell on the 27th, 3 Section moved up the chaung to the bridge site and the lorries with the bridging equipment were called up. There was little room for manoeuvre and the lorries had to back up to the site in the dark, from quite a distance. 3 Section worked through the night, a somewhat unnerving

experience at times when the odd shells were lobbed over the tunnel in their direction. By dawn the bridge was ready to let the first tank across. On arrival in front of the tunnel the first tank was unable to enter on account of the large quantity of stores there. 3 Section checked for booby traps and cleared the ammunition and ironmongery found inside - Bren guns, rifles, machinery, grenades (rifle and hand) and a 150mm gun. The latter appeared to have been taken out of the tunnel for lobbing shells and then brought back again for safety.

In the following week there was work on a piled bridge, on bridge repairs, a double raft at Aminpara, and on tracks following the capture of the Hambone feature. By 6 April several minor bridges had been completed, and the eastern Tunnel was captured on that day; 3 Section cleared it, finding no booby traps. On the far side there was a severely damaged four-span bridge, including two 62ft lattice girders on 20ft piers. Mines were found on the track between the western and eastern Tunnels, including anti-tank and magnetic mines fixed to the tops of 150mm shells. These were poorly concealed and easily removed by 3 Section. The Japanese had withdrawn completely from the area after the capture of the western Tunnel and only one wounded soldier was found as he tried to put up a fight when surprised by the mine-clearing party.

Thereafter work continued on bridges along the railway track. A small box girder hornbeam bridge was completed on the 7th. On the 10th 1 Section moved to Sinzweya to work on water supply and tracks. For much of the month the company was dispersed on mule tracks, minor bridges and water points. A primary trigonometric station was erected on Point 1975. On the 22nd work began on repairs in the eastern Tunnel, but almost immediately an advance party left for Chittagong prior to 36 Division leaving Arakan. Work continued on minor bridges, a transit camp and Corps HQ accommodation. A track was built to the 36 Division War Memorial.

On 6 May 30 Company left for Dohazari en route to Assam.

The names of officers mentioned in the War Diary are:

Maj	RL Swain
Capt	RF Locke
Lts	DS Young, RM Dyer, YM Date

The following honours are on record, not all of which will have been won in Arakan:

MC	Lt DS Young, Jem Nand Singh
MBE	Maj RL Swain
MiD	Lt RM Dyer, Jem Shankar Kadam, Nk Iqbal Singh

93 Field Company

This account is taken from the company's War Diaries (very little for 1942, sadly in near-unreadable manuscript for 1944). There is no trace of a diary for 1943 and much of the account is based on the war diary of CRE 25 Div, after consultation with HE Buckley and W Guthrie, whose personal account is with the other personal accounts. The first OC was Maj RAG Binny, succeeded by Maj RB Johnson towards the end of 1943; and the Subedar was Appa Bhosle. The Jemadars were Ram Ramchandra, Gurmukh Singh and Lal Khan.

93 Company left Kirkee in 1942 and trained with 25 Ind Div in south India until early 1944, when the division moved to east Bengal. It was then deployed west of the Mayu Range in February/March 1944, relieving 5 Ind Div which was withdrawn for re-organisation prior to redeployment on the Imphal front.

The company arrived in the Maungdaw area in late March in support of 74 Brigade and the main task was preparation of monsoon accommodation. During the monsoon they maintained the Maungdaw road to the Tunnels and did as much training as they could. Through the 1944 monsoon 25 Div held a "keep" bounded by the Ngakyedauk Pass to the north, Maungdaw to the west and the Tunnels area in the hills to the east; 93 Company was manning part of the southern perimeter of Maungdaw. As the monsoon began to abate in early September, the company was to support 74 Brigade in an attack on two peaks south of the Tunnels, on which there were enemy observation posts; their tasks were to blow up stores, ammunition dumps and bunkers, and to make mule tracks to the east of the peaks to supply our troops.

As the water level fell, the emphasis was on restoring communications within the keep and to prepare for the dry season. By November the going was drier, and the division began to push southward on both sides of the Mayu Range. The real push began in mid-December and 93 Company supported 74 Brigade in its advance along the coastal plain. With little opposition Foul Point was reached at the end of 1944. On 3 January 1945 74 Brigade landed at the north-west corner of Akyab Island, a four mile unopposed crossing from Foul Point. The first company tasks were to get the airfield into operation for the covering Hurricane squadron, and to secure the local water supply. Work then turned to preparations for the attack on the Myebon Peninsula, to the south east of Akyab.

On 12 January 74 Brigade and 42 Commando landed on the east side of the Myebon Peninsula supported by Mitchell bombers and naval gunfire, including the heavy guns of the battleship HMS *Queen Elizabeth*. The landing was unopposed and 93 Company's first tasks were to lay tracks on the sandy beach, and to clear beach exits for wheeled transport and the Sherman tanks of 19 Lancers. The domed Japanese beach mines were in evidence. Later the enemy were found dug in north of Myebon and towards the neck of the Peninsula, and were dealt with by the tanks and Commandos.

The company's tasks were to find water and to form a road up the Peninsula for wheeled vehicles. Eventually they found themselves camped alongside the Myebon River in a very different world to that of the Mayu Peninsula - one of tidal rivers, mud swamps, mangroves and low steep-sided hills covered with thick jungle. Any distance required movement by boat and most of the MT, though not the D4 bulldozer, were left behind at Akyab.

On the evening of 14 February the company was on the move again on board the Royal Indian Navy frigate *Jumna*, bound for Ru-Ywa, 40 miles from Myebon. Combermere Bay was crossed in the dark, and the frigate then nosed into the Setkaw River, before backing into a side chaung. All lights were out, no talking and everyone on their toes. There was no moon. Safely the ship nudged against the bank on the port quarter, and they went over the side. The frigate disappeared into the darkness - wonderful navigation - and the enemy were quite unaware.

The divisional plan was for one brigade to move south from Ru-Ywa while another, 74 Brigade, was to move northwards to link up with 81 (West African) Div, which was advancing south from the Kaladan. Supplies were to be ferried in by Alligator amphibians but, as these had been put in the water 12 miles out to sea, not all of them survived. One of 93 Company's first tasks was to form timber crawling ramps over which they could climb out of the water.

On 27 February a reconnaissance party with a 14/10 Baluch patrol bumped into a Japanese water party, while they were looking for water in Dukekan Chaung. On 1 March a good circular stone well, 6ft diameter and 20ft deep was completed, with 10ft of clear water at the bottom. A bulldozer working on a diversion came under fire from three guns, which then switched to the water point, but there were no casualties. A Japanese ammunition dump was found, prepared for demolition and the fuse lines were cut; a later attempt by the enemy to explode it failed. It was on one of the searches for water that Lt Wallace walked round a large tree with his Owen gun slung over his shoulder and came face to face with a Japanese carrying two buckets of water; he received a kick in the crotch, and Wallace a hit on the side of his head with a bucket: "End of Battle - this was the only decent water supply found in the area".

By day the company probed northwards looking for mines and forming by-passes to the small wooden bridges, to enable the Shermans to advance. Eventually on 2/3 March they reached the considerable obstacle of the ME Chaung, 375ft gap, 5 to 6ft water at half tide. The wooden bridge across it was smashed in two or three places, but the chaung was fordable at low tide near the bridge. This ford was in a defile where the chaung broke clear of the mountains, and could be observed by the enemy on the peaks on either side, whom our artillery tried to neutralize. Lt Guthrie and a Lt Brocklesbury went forward to inspect the chaung, and came under fire from the other side. Brocklesbury was hit in the head by a shell splinter and Guthrie carried him back over open ground to the shelter of bushes by the road. It was found that Brocklesbury was dead.

Later Guthrie was awarded the Military Cross. A Sherman was called forward and received a direct hit which did not penetrate the frontal armour. It quickly dealt with the enemy, and two dead were found beside the gun. Later Capt Buckley brought it back to Kirkee, where it now stands on a plinth at the main entrance to Group HQ (see Chapter One).

As the bridge was not worth repairing, recourse had to be to ramps down to the ford. The Mahratta Platoon were given this task but could only work effectively when the tide was low. But nearby the enemy had left a dump of heavy cable, and this was slung over the bridge, anchoring it at both ends, and forming the base for quite a good footbridge. Men on foot and wounded could get over at all states of the tide.

On 4 March, as the Mahrattas were clearing trees for the approach, they were attacked by two Japanese with hand grenades. They defended themselves with picks and shovels, but Spr Sambhu Olekar and his assailant were both killed by the same grenade. Jem Ram Ramchandra lost an eye and Spr Narayan Kandilkar died later of wounds. Four others were wounded.

On 5 and 6 March work continued on roads, mine searches and wells, and on 7 March on diversions for medium artillery. On the road northwards there was a "chicken and egg" situation; the company had to provide the road for the Sherman tanks, who in turn were necessary to deal with nests of enemy intent on holding up the infantry and sappers. It took until 9 March to reach the jetty at Tamandu only three miles from the chaung. Throughout this period water supply was becoming more and more difficult. Attempts were made to use Alligators to ferry it, but they had difficulty getting onto firm ground owing to the water cargo surging. Over the next week work continued on ferries and jetties, and on 14 March the company reached Tamandu. On that day Maj JK Wren arrived to assume command, some seven weeks after the departure of Maj Johnson. In the meantime Capt Buckley had been acting OC as he had been earlier while Maj Johnson was in hospital.

The Japanese were found in force on an area of high ground to the east of Tamandu and a three or four day battle fought by 2 Gurkhas and 16 Punjab ensued. 93 Company took little part other than providing a party armed with shaped "beehive" charges to blow in bunker roofs. Meanwhile the rest of the company were repairing jetties at Tamandu and on the Dalet Chaung. The endless search for water continued. (see map page 416)

On 22 March after handing over their duties to 63 QVO Field Company, the company embarked on a river steamer and arrived in Akyab on the 23rd. After a short stay at Akyab they disembarked at Madras on 6 April. Maj Wren was hospitalised on arrival and once again Capt Buckley was in command to take the company back to Kirkee.

The officers mentioned in the War Diaries are:

Majs	RAG Binny, RB Johnson, JK Wren
Cpts	FE Henson, HE Buckley
Lts	RL Pryce, MW Guthrie, CG Wallace, D Buttle

The following honours are on record:

MC	Maj RB Johnson, Lt WW Guthrie
MiD	Majs RB Johnson, HE Buckley
	Lt RL Pryce, LNK Govind Dalvi

Malerkotla Field Company

This account is based on the unit's War Diaries after consultation with HE Buckley. The unit was part of the Indian State Forces, affiliated to the RBS&M (see Chapter One). The company must have had more active service than many, beginning in south Burma in January 1942, with the retreat northwards and the demolition of the Sittang bridge. It had mobilized at Nowshera in the North West Frontier Province on 2 November 1941, including in their transport 18 mules, 5 chargers and a pony. By August 1942 they were in Shillong, moving in February 1943 back to India for training at Ranchi. In December 1942 the following awards and promotions were noted:

Hav Said Mohammad Khan	Awarded IDSM and promoted Jemadar
Nk Sardar Ali Shah	Awarded Force Commander's Certificate
Lt Bashir Ahmad Khan	Mentioned in despatches (Waziristan)
Hav Naranjan Singh	Promoted Jemadar

On 12 August 1943 the company was assigned to 15 Corps Troops Engineers, changing from its Light Field Company establishment to the standard one. On 26 August Sub Godha Ram left and Jems Safdar Jang Khan and Bhagwan Das were promoted subedar and Hav Maj Gopal Singh was promoted jemadar.

In late August the company sailed from Madras in HT *Ellenga* via Vizagapatam to Chittagong in a convoy with two sloops as escort and Catalina flying boat cover. They staged at Maynamatti near Comilla and by the end of October had reached Bawli North, beginning to work with 600 coolies on the road to Nawapara. On 10 November work began on building two jetties for heavy vehicles on the south bank of the Prua Chaung at Bawli, which was completed on 14 December. In early December an 80ft standard timber bridge was built to the north west of Bawli, and two double bent piers (14 30ft piles, 12in diameter) were built for 100ft Bailey spans on the alignment of the Bawli low level bridge. Another major task in December was the construction of a camp site to the south of Bawli for 15 Corps HQ. On 12 December the company was visited by the Engineer in Chief, War Office with Chief Engineer SEAC; and two days later by Lord Louis Mountbatten.

By 14 January it had completed 250ft run of standard Arakan Class 12 bridge, some with 40ft RSJs and double-piled piers, and on 13 January it began to move forward to Maungdaw, to restore to Class 12 the Tat Chaung bridge on the former railway line between the town and the Naf River landing stage; in addition

some 180ft run of Small Box Girder bridging was put over gaps resulting from demolitions carried out in the previous year.

As the Japanese assault developed in the first week in February, the company took up a perimeter role at Maungdaw and undertook a mixture of engineer tasks from patching up an old iron bridge to collecting piles, demolition of enemy positions, maintenance of anti-personnel minefields, and sinking tube wells for the local population. During much of February it was under command of CRE 5 Ind Div, and in support of 9 Jats; the CRE recorded that it was "the mainstay of the defence of Maungdaw". The company also took part in a raid by West African troops on the night of 10 February, providing a boat and crew to land a party through surf at Indin, 20 miles behind the Japanese lines. One Japanese and one JIF were killed, and documents and kit were captured.

On 27 February the company moved back to Bawli to road work, mainly to open the Goppe Pass to Class 12 (dry weather), with some water supply for adjacent units. In late April there was a high spot, with the visit of the Nawab of Malerkotla, Lt Col HH Sir Mohammad Ali Khan Bahadur KCSI KCIE being celebrated in style. The Nawab presented a purse of Rs 1500. His nephew, a sapper in the company, was promoted to naik for the period of the visit, and demoted immediately afterwards.

By 10 April the Goppe Pass was 75% complete. It was finished in May and the intention was that during the monsoon it should be passable all-weather for mules, and for occasional jeeps in dry spells. Around this time Maj Orgill was succeeded by Maj ERB Hudson. May and June passed in dismantling the low-level bridge at Bawli, in making defences for other bridges during the monsoon and in road and bridge maintenance. On 8 July the company withdrew to Rumkhalong for training and reorganisation.

On 1 October they moved to Teknaf on the Naf Peninsula to build jetties, ramps, tank diversions and a Class 30 causeway to enable tanks to be ferried across the Naf River to Maungdaw. This work continued into November, plus work on a casualty clearing station and a veterinary hospital. On 16/19 November the company moved across the Naf River to Letwedet, east of Maungdaw to work on the road to Buthidaung. This involved the usual road and bridge work, and also removing the wreckage of an old bowstring girder railway bridge and floating jetties at Buthidaung.

All this continued into January 1945, plus the construction of a 150ft triple double Bailey bridge, some Class 30 diversions and an increasing water supply load. By 20 January the company was on to training and preparing to move south, and by 12 February it was established at Akyab. Here the work was to set up and maintain the Rear Army Maintenance Organisation; road building and maintenance, plinths for accommodation and an ammunition depot; water points; drains, and repair of old buildings.

On 30 April Maj JAT Fisher assumed command and on 6 June the company embarked for Madras.

The officers mentioned in the War Diary are:

Majs	RC Orgill, ERB Hudson, JAT Fisher
Cpts	FB Nixon, HE Buckley
Lts	OG Walsh, EJ Wilcox

The only honours on record are in respect of Maj Orgill, an MiD, possibly from the first Burma campaign in 1942, and an OBE, probably for his service after Arakan as CRE 5 Division.

401 Field Squadron

This account is taken from the unit's War Diary for 1944 and from a note by Lt Col EHP Berry. Unfortunately the Diary is available only for January 1944.

The squadron was formed at Dighi in late 1942, intended to be part of the divisional engineers of 43 Ind Armd Div, which was to form at Secunderabad. The OC was Maj PG Burrell and the Sub Shah Zaman. By the time the squadron moved to Secunderabad in early 1943 it was clear that the brigades of the division were likely to be committed individually in Burma and preparations began to break up the division. 401 Field Squadron was allotted to a regimental group based on 25 Dragoons, to operate with 15 Indian Corps in Arakan.

The summer of 1943 passed in jungle training at Ranchi and by the end of the year the squadron had moved to the 15 Corps rear area, via Chittagong and Cox's Bazaar. There they married up with 25 Dragoons, ready to move forward in support of 5 British and 7 Ind Divs. The terrain consisted of jungle with paddy fields, with numerous steep-banked chaungs running down into the valleys. Without sapper assistance the 30ton Lee/Grant tanks could seldom move in support of the infantry, so sappers were much in demand. Their tasks included chaung crossings for tanks, track work using "corduroy" made from local timber, and water supply. Forward reconnaissances and some mine clearance were carried out for future lines of advance for tanks.

By 9 January 1944 the squadron was committed to moving the tanks forward. B Troop was loading them on to barges at Tumbru, and A Troop to unloading them at Bawli; C Troop was preparing tracks and diversions on the Ngakyedauk Pass, further to the south. The squadron moved to Chamba, near the western entry to the pass on 13 January, and spent the next week building corduroy crossings. By then the three squadrons of 25 Dragoons were deployed in support of 7 Div to the east of the Mayu Range, and of 5 Div, initially to the west.

At first the main tasks were corduroy crossings. On 19 January the whole squadron acted as a carrying party in support of 20 Field Squadron of 5 Div, and were shot at - their first inoculation of fire; it proved valuable later on.

Thereafter they moved into a battle assembly area north of the Rerat Chaung and reconnaissances were made on 23 and 24 January for three tank crossings over it. These were effected on the night of 24/25 with one troop on each. Japanese positions were within 200yds, and it was thought curious that they did not interfere. Propaganda broadcasts were used to cover the noise of digging. On 26/27 January C Squadron 25 Dragoons supported an infantry attack on the Tortoise feature. The attack continued over the next two days. One of the tank crossings failed, one was not used, and the third carried 48 tank crossings. The bamboo fascines used were very successful.

On 4 February the Japanese attacked both 5 and 7 Divs on the line of the Maungdaw to Buthidaung road and all three squadrons of 25 Dragoons, each supported by a troop of 401 Squadron were to be in action in the ensuing defensive battle; these included the Admin Box where the Japanese surrounded a large part of 7 Div, who then survived on air supplies until relieved by 26 Indian Division towards the end of February. By then the Japanese assault had petered out and, with 26 Div established in place of 7 Div to the east of the Mayu Range, the advance towards the Maungdaw to Buthidaung road began again, with 25 Dragoons in support. 401 Squadron was involved in the battle for the tunnel entrances and in the elimination of the Razabil strong points. Few if any Japanese prisoners were taken. Engineer tasks were mainly mine clearing, often under fire, and route clearance for tanks. Demolition charges were tried against Japanese bunkers, but were not nearly as effective as the tanks' main armament firing armour-piercing shot.

As the Japanese offensive in Arakan ebbed, it became clear that a major attack was imminent to the north, and many units were withdrawn from 15 Corps to reinforce 4 Corps in the Imphal area. Among these were 401 Squadron less its Sikh troop (Lt Berry), which remained in Arakan with the 25 Dragoons group; also the squadron reconnaissance officer, Lt Briggs, was attached to the regimental HQ. Briggs and the 25 Dragoons Reconnaissance Troop commander took turns in leading regular night patrols which were essential to find lines of advance for the tanks in the projected advance on Akyab. On one of these patrols Briggs was killed, when he and a 25 Dragoons sergeant ran into a Japanese ambush. For his outstanding work on these hazardous patrols Briggs was awarded the Military Cross.

With the 1944 monsoon fast approaching, and the lack of reinforcements to replace the formations transferred to the Imphal front, the 15 Corps advance on Akyab made little progress against strong Japanese resistance, and the 25 Dragoons Group was involved only in minor actions. The engineer work in support again involved track improvement for tanks, chaung crossings and bridging and mine clearance, plus some water supply. Just as the pace of life was beginning to slacken, the Group's morale lifted when it became known that they were to withdraw from Arakan, leaving the tanks behind in care and maintenance. They were to reform at No 3 Amphibious Training Centre at

Coconada with Sherman DD (Duplex Drive) or "swimming" tanks, and to train with these for the projected assault landings in Malaya (Operation Zipper). The Sikh Troop's final task was to construct hides with hard-standings for all 25 Dragoons 50 odd tanks where they would hopefully withstand the monsoon rains and humidity.

With the return from Burma and the continuation of the 25 Dragoons Group in its new role, it was decided that the Sikh Troop should be "divorced" from 401 Squadron, to be re-designated as 488 Independent Field Troop. Apart from a much better equipment table, a few extra sappers and better messing staff and equipment, the main difference was that the OC was promoted to Captain and given a Troop Subaltern.

The names of the officers mentioned in the War Diary are:

Maj	PG Burrell
Capt	A Harley
Lts	EHP Berry, Adams, Aga, E Briggs

The following honours are on record, not all of which will have been won in Arakan:

MC	Lts WS Adams, E Briggs
MM	Nk Mohammad Din
MiD	Maj PG Burrell, Lt K Ryden
	Sub Shah Zaman, Bhagwantrao More
	Nks Mohammad Din, Muzaffar Hussein,
	Ramchandra Scinde, Hanumant Chowan
	LNk Bapu Patel, Sprs Narayan Thakar, Wahid Bax

After leaving Arakan, Lt Ryden went on to win an MC and Bar in operations on the Imphal front and in Central Burma.

20 Field Company

This account is taken from the unit's war diary for 1943; unfortunately there is no diary for 1944, and information for January and February of that year is derived from the diary of CRE 5 Ind Div. It has not been possible to find any surviving officer of the unit.

20 Company was a pre-war unit, which had served in 5 Div in the Middle East. After a period of training and re-equipment the division moved to East Bengal in October 1943, en route for Arakan. 20 Company disembarked at Chittagong on 24 October, and by early November was at work on road maintenance, jetties and strengthening bridges in the Bawli area. In early December they were building Mountbatten Bridge, a Class 24 timber structure. By early January they had moved forward to the Ledwedet area, in support of 9 Ind Infantry Brigade. Their tasks were tracks, water supply, bunker busting and a reconnaissance of the Letwedet - Razabil - East Tunnel route.

By 24 January the division was ready to advance. 20 Company, still in support of 9 Brigade, was tasked for road maintenance, jeep tracks and tank diversions. The brigade was in divisional reserve, and by 1 February was on the east of the

Mayuy Range with 20 Company improving tracks to Class 9, smoothing out four tank crossings and making jeep tracks to the south of the Ngakyedauk Pass; and for this work C Company of 24 Engineer Battalion was under their command.

Following the opening of the Japanese attack on 4 February, 20 Company was ordered to hold its position as infantry, with its transport in its B Echelon, a mile or so the rear. Movement even of jeeps was prevented by rain, so their equipment was buried except for picks, shovels, cutting tools, explosives and booby traps. Over the next three weeks the company patrolled regularly; five-man recce and contact patrols by day and nine-man standing patrols by night. Japanese nuisance parties were around most nights.

Apparently unknown to 20 Company, 9 Brigade withdrew on 6 February to the foot of the Ngakyedauk Pass. Lt Holland was sent to liaise with the Brigade HQ that afternoon, but after his return (around 1730) there was no contact with the brigade until an order was received via the A Echelon of 3/14 Punjab at 0300 on 8 February.

There was much Japanese activity on the night of 6 February, and early the next day a reconnaissance patrol reported some 50-60 Japanese on a hillock some 800yds away. The only approach was along a knife-edge track which was secure; hopes of harassing them with 2in mortars from 3/14 Punjab were frustrated, as the weapons arrived too late. The order which arrived at 0300 on 8 February instructed the company to join the Punjab A Echelon command, and by 0630 most of the unit had done so. That evening a Japanese attack was beaten off, but 20 Company was not greatly involved. On 10 February the A Echelon with the whole company moved to the north end of the battalion area, ferrying equipment and ammunition by jeep.

This was an extremely fluid period, as can be seen from the account of 24 Engineer Battalion. There are illuminating sidelights in the war diary of CRE 5 Div:

- a. Signals to CE 15 Corps:

8 February	20 Company last heard of 0714, no food nor ammunition, location 423471. 9 Brigade ordered 3/14 Punjab to bring them in.
11 February	In RT communication with 20 Company. In good heart, lost some equipment.
- b. CRE's Intsum:

20 Company suffered the usual fate of field companies under command of brigades, being left in the middle when 9 Brigade withdrew north and south into secure bases. They buried equipment, retrieved almost everything.

Over the next three weeks Japanese nuisance parties were active most nights. On the night of 24 February a Japanese patrol ran into the position and was shot up. There was much firing and grenades with one Japanese wounded for sure.

The next night A/Hav Santa Singh's sub-section was part of a 3/14 Punjab standing patrol south of Kreinyaung. A party of about 100 retreating Japs bumped their post but Santa Singh coolly allowed their scouts to pass by until a main body was collected in anullah immediately below his position. He then opened up with grenades and controlled his men in the subsequent fire-fight to such effect that the Japs were completely routed. His conduct in the infantry fighting from 5 to 29 Feb earned him the IDSM.

On 28 February the relief of 5 Div began. The next day 20 Company were back in their original position, where they retrieved most of their buried equipment. The Japanese had not found the dump until about 25 February; only some clothing and personal effects were lost. The company's only casualties were sustained on the way out, two killed and five wounded. On 3 March GOC 5 Division visited the company and congratulated them on their part in the operations east of the Mayu Range. Soon afterward 5 Div was withdrawn into Army reserve, prior to moving to the Imphal front, where they were in action by late March. 20 Company left Maungdaw by road on 22 March.

The officers named in the war diary are:

Maj	ET Abbott
Capt	AP Smith
Lts	JKN Yyearsley, JD Holland, PF Holt

The following honours are on record, not all of which will have been won in Arakan:

MC	Lt JKN Yyearsley
IDSM	A/Hav Santa Singh
MM	Spr Babu Singh
MiD	Maj PG Hatch, Lt JK Yyearsley, Hav Maj Akal Jang
	Havs Narayan Kharade, Sarwan Singh, Santokh Singh,
	Chandru Panaskar, Kafait Ali
	Nks Shamas Din, Vhagwan Nagar, Kartar Singh

11 Bridge Platoon

This account is taken from the unit's war diaries for 1944 and 1945. The first note is of its arrival at Rumkhapalong on 3 January 1944. There is no record of its formation in Kirkee nor of its arrival in east Bengal; it seems likely that it was raised in 1943. The OC in January 1944 was Capt G Wilcock and the jemadar Atmaram Bhasalkar.

On arrival it took over the Corps Bridging Reserve from 403 Field Park Squadron, and on 13 January moved to Sabaigon, two miles south of Bawli, as part of 15 Corps Troops Engineers. On 4 February the Japanese encircling movement developed through Taung Bazaar, and the platoon stood to in defensive positions over the next few weeks. On 10 February all floating bridge equipment was evacuated to Rumkhapalong, and two days later movement began of the engineer stores depot and Corps bridging reserve northwards to Mromigaung. The remainder of the month passed in maintenance of all transport and bridging equipment. During the period 8 January to 16 March Nk Mohinder Singh was

in charge of the ferry detachment at Htizwe, working long hours, often without relief drivers, and faced with almost continuous traffic. During the evacuation on 15 and 16 March he continued to handle his boats with great skill and coolness until all the troops had been taken off, despite coming under fire from machine guns, artillery and aircraft. His steady example earned him the IDSM.

Thereafter until the monsoon broke in May the platoon was busy maintaining and issuing equipment, and in preparing for the rains. During the monsoon there were issues of ferrying equipment, to replace washed-out bridges. In August the unit moved to Rumkhapalong and on 9 October Sub Ananda Todkar arrived to replace Jem Atmaram Bhasalkar. By then a comprehensive overhaul and repaint of all equipment had been completed, and further issues began. On 30 November the platoon came under command of 82 (West African) Div, and on 3 December moved forward to Yegaung Chaung.

On 15 December Capt P Maccawley took over command. The next week the whole unit moved to Buthidaung, and a busy period of issues to 82 Div began. This involved batwing rafts and boating on the Kalapanzin River and ferry operations at Buthidaung and Htizwe. On 29 January Lt Hepper died and was buried at Maungdaw.

February passed in lifting and loading wet and dry bridging to support the move forward of 23 Div and 82(WA) Div. On 21 February the platoon came under command of 855 Heavy Bridge Company. Thereafter there was a period of general maintenance until 16 March, when vehicles and equipment were handed over. On 27 March the platoon moved north and left Dohazari by train on 5 April, reaching Cuttack on 8 April and Coimbatore on 12 April.

The officers mentioned in the war diary are:

Cpts	G Wilcock, PR Maccawley
Lts	SK Prestige, RL Hepper

96 Field Company

The only war diary is for 1945, but RG Atkinson has memories of it, when he was attached to it in August 1944. It was at Avadi, a large base being established near Madras. In early October it received the thanks of the Base Commander for its good work in the base, which by then was essentially complete. The OC at the time was Maj GS Homewood, later OC 98 Company.

The 1945 war diary begins with the company at Mangdaw and Teknaf, under command of CRE 117 Works, dismantling bridges on the Goppe Pass and making Class 9 diversions. Later it was dismantling bridges and water supply stores at Buthidaung and on 30 March it moved to Cox's Bazaar. Here work began on a new jetty using a steam pile driver, but this was abandoned in May. On 19 June the company moved to Patenga for training as part of 626 Army Troops Engineers.

Maj Dawson assumed command on 20 August and on 14 October they entrained at Patenga for Madras. On 19 November they arrived at Hong Kong.

The officers mentioned in the war diary are:

Majs	AJ Moss,	GS Homewood,	GB Dawson
Lts	BC Stone,	F Healey,	JM Harris, KH StC Pringle, CG Welsh

Headquarters, 15 Corps Troops Engineers

This account is taken from the unit's war diaries after consultation with HE Buckley and Lt Col CWR Story.

This HQ was formed from the CRE 34 Ind Div team in Ceylon. It had returned to India by early 1943, and was in limbo at Dighi before moving to the Ranchi area in May. Lt Col JR Connor took over as CRE on 13 August. During this time it was re-designated as 15 Corps Troops Engineers (CTE), prior to moving to Arakan in mid-September. By the end of the month the CRE had made reconnaissances to Bawli and the Goppe Pass, and had visited his "core" units, 73, 483 and Malerkotla Field Companies, and 403 Field Park Company. 24 Engineer Battalion came under command, at the end of December, moving to under command 7 Div East of the Ngakyedauk Pass in late January 1944. 23 Engineer Battalion arrived on 16 January.

The first major task was the replacement of the low-level bridge at Bawli; 632ft of piled and framed bridge built by Malerkotla Company from local timber processed by 403 Field Park Company, who also made the dogs and spikes. This bridge was finished in time for 7 and 5 Divs to cross in on their way south to the Maungdaw - Buthidaung line. It is notable that a back-packer reported in 1995 that this bridge is still in use. Other bridges were built on the road to Maungdaw of which one, Load Class 12, is memorable, having been crossed by a Sherman tank, which drove the timber piles deep into the mud so that the bridge adopted a catenary profile. The tank survived.

By the time the Japanese attack developed on 4 February the CTE were extended on road maintenance, bridge building and the rehabilitation of Maungdaw, which the Japanese had evacuated at the turn of the year. During the attack the Malerkotla Company played a significant part in the defence of Maungdaw, and most of the remainder of the CTE concentrated in defensive positions at Sabaigon, near the western entry to the Goppe track. The emergency was reducing by mid-February, and the main concern became the improvement of communications to Goppe. During the month reconnaissances and clearance for the proposed ropeway were in hand, and on 4 March the CTE were tasked to bring the track across the pass to Class 12 (fair weather), with Class 30 bridges. Next day there was a visit by the Maharajah of Jaipur with the Military Adviser in Chief to the Indian State Forces; and the Corps Commander, Lt Gen Sir Philip Christison, visited the work on the Goppe track. By 10 April the fair weather alignment was 75% complete, and it was finished in early May. Through

the monsoon the requirement for it was to be "all weather mules, with occasional jeeps in dry spells"; and even this proved hard to maintain at all times.

In May HQ CTE moved to Rumkhapalong for the monsoon. All units went into monsoon accommodation, with heavy road and bridge maintenance commitments. A particular emergency was the Idgaon bridge, washed out in June and replaced first with a 140ft Bailey Bridge, later to be replaced by 73 Company with a timber bridge. 73 and 483 Companies operated Class 9 ferries where possible. During June 532 Artizan Works Company and 563 Ropeway Section were at work on the Goppe ropeway, and by the end of the month the steelwork and machinery were installed, and the rope tensioned and running.

These works on the Goppe Pass were a considerable achievement. Back in March Chief Engineer 15 Corps, greatly concerned to enable the passage of maintenance across the Mayu Range in all weather conditions, had reached conclusions which were hardly encouraging:

- a. No possibility of an all weather alignment across the Ngakyedauk Pass by June;
- b. "Some hope" of Class 12 fair weather route across Goppe by then; better for mules, and less vulnerable tactically;
- c. Doubtful if the ropeway could be completed within six months: for which a fair weather access track was essential;
 - it could only deliver 35 - 50 tons per day, very little as compared to what a fair weather track could;
 - the only justification for the ropeway was to reduce wastage of mules.

In August 23 and 24 Engineer Battalions were ordered out of Arakan and 16 Engineer Battalion moved to Ukhia. A major task arose in the reconstruction of Chiringa bridge, with two 120ft Bailey spans on piled abutments and centre piers, completed on 4 September. Other tasks were maintenance of major routes, and building jetties, subsidiary road maintenance and water supply at Bawli, Maungdaw and Teknaf. The Idgaon bridge was up-graded to triple-single Bailey. These tasks went on into September, plus the re-instatement of 14 fair weather airstrips and the remetalling of the Maungdaw to Razabil road. The Goppe ropeway was taken over, and 434 Field Company arrived for work on airfields.

In October and November a major task was to bring the Maungdaw to Buthidaung road to all weather Class 30, wherever possible two-way; and there was still much work in Bawli, Teknaf and Maungdaw on roads, tank ramps and diversions, jetties and water supply. By November the CRE had under command, in addition to his "core" units of three field companies and the field park company, most of 16 and 20 Engineer Battalions, two Indian Pioneer Companies and a platoon of a General Purpose Transport Company.

On 21 December these tasks were handed over to the commander of a new Army Group Engineers and HQ 15 CTE began to prepare to move to Akyab Island, where 483 Field Company and 403 Field Park Company were established by 20 January.

The CTE faced a big commitment in Akyab, "to develop the island as a port and base, and to build airfields" for the supply of 14 Army, now moving southwards through central Burma. The first tasks were to complete Akyab Main Airfield, and to construct two 2000yds fair weather airfields; to install petrol lines; to start on stores and base accommodation; and to provide adequate water supply. Malerkotla Field Company was settled in Akyab by 12 February and these tasks occupied the CTE for the rest of their time on the island.

On 4 February Lt Col NL Stuart MBE relieved Lt Col Connor and in early June the HQ embarked for India arriving at Madras on 9 June.

The officers mentioned in the war diaries are:

Lt Cols	T Wright, EBE Bolton, JR Connor, NL Stuart MBE
Cpts	CWR Story, DH Anderson, PM Leslie-Jones
Lts	SK Prestige, HE Buckley, FW Eddolls, FH Lane, R Steven, CW Denniss, JW Lindner, IP Shanks

The only honour on record is an OBE for Lt Col Connor who was not originally a Bomber Sapper.

37 Field Squadron

This account is taken from the squadron's war diaries. The OC was Maj R Wood. For most of the eight months or so that it was in Arakan, one or more troops were detached with individual armoured regiments. Unfortunately the war diaries do not cover all these detachments, so that this account has to be something of a patchwork. It has not been possible to contact any former member of the unit.

In October 1944 the squadron was at Nira Camp near Ahmadnagar, as part of 50 Tank Brigade. From 6 to 14 November they made the long journey to Wabyin, north of Maungdaw via rail (Kalyan Raipur, Howrah, Goalundo Ghat), river steamer to Chandpur, train to Chittagong and thence by steamer to Tumbru Ghat and road to Wabyin.

November passed in settling in, with work on tracks, defences and water supply. On 21 November Lt Rozario made a reconnaissance of the Ledwedet - "Poland" area east of the Tunnels for tank hides. In the following week work centred on tank diversions out of the brigade area, and C Troop helped 32 tanks (Lees, Grants and a bridgelayer) to land at Aminpara. By the end of the month 33 tanks had been escorted into the Ledwedet hides.

On 7 December A and B Troops moved to Taung Bazaar, to under command 4(WA) Brigade; an account of this attachment is below. C Troop remained in support C Squadron 9 Lancers in co-operation with 4(WA) Brigade, reaching Htindaw on 13 December. Their tasks were diversions and mine clearances and the OC made a reconnaissance (in the course of which he was sniped at) of

Buthidaung and of a line of advance southward for a troop of C Squadron. This armoured troop went forward on 16 December, and C Troop was occupied with mine and booby trap searches, and making "blind areas" from derelict buildings. They dug up a Japanese bunker; no bodies, but much ammunition, explosives and mines. After the Troop OC had made a reconnaissance for an alternative route southward along the Kalapanzin on 18 December, the troop returned the next day to Wabyin with the prospect of taking part in a sea landing near Indin; but this did not materialize. On 20 December the Supreme Allied Commander, Lord Louis Mountbatten, addressed all English-speaking ranks of 50 Tank Brigade.

After arriving at Taung Bazaar on 7 December, reconnaissances were made of routes to the south, a batwing ferry and a Class 5 bridge were built at Taung Jetty on 9 December. The next three days were taken up with road repairs and diversions, and in experiments of infantry rafting expedients. On 13 December ramps were prepared for Class 5 and Class 30 ferries. Rafting began the next day, and on 15 December ten Stuart tanks of B Squadron 45 Cavalry were ferried across the Kalapanzin on batwing rafts; and work began on an airstrip nearby.

On 16 December it was possible to reconnoitre Kwazon, about 12 miles south of Buthidaung, and over the next few days bombs and booby traps were removed there. Approaches were made to a bridge site and on 18 December an emergency bridge was made with a Valentine bridge-layer to enable Stuart tanks to attack a bunker to the east. On the same day the airstrip was finished, and on 19 December the tanks were ordered back to Taung Bazaar. After a period of reverse-rafting A and B Troops returned from 82 (WA) Div to Wabyin on 21 December. Thereafter parts of A and B Troops took part in mine lifting at Buthidaung, and on 25 December A Troop was detached for a week to under command of 63 Field Company of 25 Div, for work on the beach road and to assist 19 Lancers in their advance southward.

In January 1945 C Troop was in support A Squadron 19 Lancers, B Troop under command 45 Cavalry, and A Troop were preparing to land on Ramree Island in support of 146 Regiment RAC. The landing took place on 21 January, and there is an account below of A Troop in this detachment, which lasted until 13 May.

There is no record of B and C Troops' activities at this time. They may have remained with the Squadron HQ in the Wabyin area. There was a period of uncertainty in February, with a warning order early in the month that 50 Tank Brigade would be withdrawn from SEAC. On 18 February the squadron actually moved north to Dohazari and then came back to Wabyin. It was ruled on 20 February that the squadron should stay with the brigade until the last tanks left Arakan. By 26 February a tank route from Wabyin to Alethangyaw on the coast was open, and on 27 February 130 tanks moved to the beach for embarkation later on.

Again in early March there were contradictory orders whether or not to move to Chittagong. On 6 March B and C Troops and the rear party of A Troop moved to Alethangyaw for a rest period. On 14/16 March the squadron less A Troop moved to Chittagong, en route for Ramree Island, and on 15 March the tanks and B vehicles of the brigade were embarked from Alethangyaw. 37 Field Squadron finally arrived at Kyaukpyu on Ramree on 25/27 March.

A Troop took part in the landing at Kyaukpyu at the north end of Ramree Island on 21 January, in support of 146 Regiment RAC. There is no record of its activities on Ramree, but it was certainly actively engaged of the tanks in mine clearing, tank diversions and forest clearance. The OC Troop, Lt JF Cull, was awarded an immediate Military Cross early on. Ramree Town was taken on 11 February and there followed a period of mopping up, mine clearing and improvement of communications.

On 13 March A Troop embarked at Kyaukpyu, still in support of 146 Regiment, landing later that day at Pyinwan (north of the Mai Chaung on the mainland) where they were bombed by friendly aircraft. The next weeks were taken up with tank diversions and reconnaissances for chaung crossings, and on 20 March the advance southward towards Taungup began. That day the troop removed a small road block of felled trees, having five sappers wounded by "friendly" mortar fire. Next day they cleared two mined road blocks and had one man wounded, this time by enemy fire. Over the next week several tank diversions were made, and road blocks cleared. On 24 March they reached Yebok, whence they advanced over the next week to Mingyaungdo, where there seems to have been a pause: "NTR" in the diary until 24 April. Field Marshal Slim mentions "a hold-up 5 miles short of Taungup, in difficult country".

In the last week of April there were reconnaissances of possible approaches to Taungup, involving several chaung crossings and diversions. The town appears to have fallen towards the end of the month, and A Troop returned to Mingyaungdo. Again there is "NTR" in the diary until 12 May when the troop embarked at Kindaungyi, arriving at Kyaukpyu on 13 May.

The squadron began work at once on Nissen hut foundations in the Rear Army Maintenance Organisation, and then on road construction using rubble from demolished buildings. In late April they began extending Jetty 9 to the Ramo feeder road. There was an excitement on 27 April when a vehicle struck a rogue mine on a nearby beach. Throughout May work continued on Nissen huts and feeder roads, and on 10 June the squadron broke off work to prepare to return to India. On 21 June the main body sailed for Madras on HMS *Persimmon*.

The officers mentioned in the war diary are:

Maj	R Wood
Capt	AD Davenport
Lts	JF Cull, JA Rozario, JE Sayers, VV Bhide

Anecdotal Stories

The Suspension of the Civil Power (August 1996 issue of the RE Journal)

We were all rather proud of the aerial ropeway; we were sure it was the only one in operation against the Japanese. It didn't belong to us, but was operated by a detachment from elsewhere under a Sapper and Miner subaltern, with a platoon of Gurkhas guarding the engine house at the top of the pass.

It had been put up around the second quarter of 1944. The idea was to ease the truly horrendous 10-mile stage across the Mayu Range in Arakan, between Bawli and Goppe Bazaars, where the annual rainfall was over 400 inches. The trouble was that there was no stone worthy of the name in Arakan; it was said that a hundred million bricks were fired to surface the road from Chittagong, some 100 miles. We took what looked like stones from the chaungs to surface mule and jeep tracks, only to find them decaying into bottomless mud within weeks. You could lose your boots in a few paces, mules got bogged and even drowned, and the maintenance work was out of all proportion to tonnage delivered.

The ropeway had been found on a tea garden in Assam, where its record over many decades had been blameless. Transplanted on the Goppe Pass it ran from the engine house at the top (2000ft) for about three miles to a camp at paddy level, whence the track to Goppe was comparatively easy. At the top it was an imposing sight, with an exceptionally long span of about 300 yards across a 400 ft deep gorge, to the first pylon. There were two functions: to load supplies forward to Goppe, and to bring what passed for stone to the summit to maintain the tracks on either side.

For most of the time it worked a treat, but there was a snag. The steel wire rope was worn and polished with many years' use, and the grips from which the load hoppers were suspended were liable to slip. This would occur with a too-heavy load in an upward-bound hopper, which would then slide gently down until it met the next one coming up. What happened next was always interesting. Either the two would travel together, sagging fearsomely and straining the asthmatic Ford V8 engine to its limit or they would slip back together to the third upward-bound hopper. This was always too much for the engine, which would stall, and the three hoppers would settle stranded on the ground. The Gurkhas would then rush down, unload the hoppers, and the engine would be started up again. All this could be much more difficult than it sounds and there were stringent orders that human beings were under no circumstances to try joy-riding on the ropeway.

It happened on a day that the local civil administrator, dressed as a Sub-Lieutenant in the Royal Burmese Naval Volunteer Reserve, arrived at the summit. The poor man was in a hurry to get to Goppe and no doubt - like many

others before him - had been exhausted by the dreadful climb up through the mud. He insisted on riding on the ropeway. The subaltern protested and, being over-ruled, extracted a signature absolving him of any blame for the consequences.

And then the worst happened. As the Civil Power departed, a hopper began to slip.... to the next one.... and to the third. The motor stalled. The three hoppers came to rest in the chaung at the foot of the gorge. And the Civil Power was suspended - literally - 400ft from anywhere. The Gurkhas knew exactly what to do. With such an important person aloft, the urgency was extreme. They charged down the khud, both feet together, and threw the upward-bound rocks out of the hoppers in a matter of seconds. Thus released, the hoppers shot upwards, and the six miles of steel wire rope began to vibrate like the string of a giant violin. The Civil Power found himself describing a simple harmonic motion, amplitude 100ft, period 2 seconds, damping negligible. It was well over half an hour before he could be winched back to land.

He was never seen on the Pass again.

The "Queen Mary" A Note by a Field Company Subaltern

An anecdote which I remember from my time in Arakan; I cannot vouch for its accuracy, and I am fairly sure it did not concern a Bombay Sapper unit. I have recounted it on sundry occasions as a classic piece of "Royal" engineering - as opposed to "Real" engineering.

Prior to the withdrawal from Buthidaung in April 1943, there was an acute shortage of boats. The sappers found an old ship's lifeboat, known as a "Warren" lifeboat. It had a system of levers and cranks, worked by the occupants, which drove a propellor. Someone had the inspired idea of removing all the cranks and levers and installing an engine and gearbox from a wrecked 15cwt truck, to drive the propellor. This was duly carried out. The vessel was painted and given a canvas awning, and the CRE invited to launch it; he named it *Queen Mary*. It worked well but for one snag - it had 4 speeds in reverse and 1 forwards!

A colleague in the same company writes that it was cast up in the Naf Estuary and it was thought that it might help in evacuating troops from Maungdaw across the estuary should that prove necessary. The operation was organised by the MT Sergeant and his people. They did an excellent job, but the first result was something of a surprise, as noted above. But the affair shows the advantage of being a Bombay Sapper; once the technique was mastered, the craft was a great success. But I must admit, I never knew if it was put to any operational use.

Wild Life in the Arakan

Tame elephants were not used in Arakan, as were those of "Elephant Bill" Williams in the central front; but there were plenty of wild ones. A company patrol of 1 Royal Lincolns was treed by a small herd on the Teknaf Peninsula. It was no light matter for a Bren gun picket set up on the razor-back ridge of the Mayu Range, to find that it was on a favourite elephant route. A Sapper and Miner patrol near the Goppe Pass once found itself surrounded, as it seemed, by elephants; they could be heard all round, and their fresh and steaming droppings, but not a single one was seen. Jem Bakr Khan of 98 Field Company built a trestle bridge on the Goppe pass using trees cut from the jungle, finishing it in the evening. As is well known, elephants will not cross anything they perceive to be unsafe. Next morning Bakr Khan was gratified to learn that the footprints of three elephants, two large and one small, had crossed the bridge during the night. Then, wanting to get down to the chaung bed, they had taken advantage of the spoil thrown from the track by sliding down it on their bottoms, leaving two large and one small slide marks. Perhaps this is a standard form of elephantine locomotion. Capt Baillie of 26 Field Company, when trying desperately to find a mule route across the razor-backed Mayu Range near Myinbu, followed an elephant trail to a point on the ridge where the elephant had sat on his bottom and slid about 200ft down to a track below.

There were said to be tigers, though few had actually seen one. Ganpat Chowan, the worthy and rather thick havildar-major of 28 Company had an experience on the evening of celebrating Dasehra. The company was camped in a quiet area near the Goppe Pass and this was quite a party. Towards the end, Ganpat, an upstanding and very dark Konkani Mahratta, went out to answer a call of nature and returned a dim grey colour and quaking.... "Sahib, sab se hi bara bagh dekha hun" ("I've seen a giant tiger"). He was told that he had had too much rum, and to go to bed. But next morning a large and quite unmistakeable pug mark of a tiger was found in the mud on the path to the latrine. And Lt Stanley of 328 Field Park Company had a narrow escape while asleep near Taungbro in May 1943. His orderly, Bachilter Singh, saw a tiger examining his sleeping officer, but dared not shoot for fear of killing him. The tiger wandered off; its appearance was reported by other units and was recorded in the unit's war diary.

Snakes were abundant, though seldom seen, and cases of snake-bite were rare, although they had a nasty habit of getting stuck in slit trenches. The krait was a danger and often lethal, being inconspicuous and liable to strike at an unprotected ankle. Floods in the monsoon would force snakes on to the hillocks from the paddy fields. This happened in a company whose mess was on such a hillock; the floods rose and the company doctor killed and dissected some thirty small snakes in a morning. At the other end of the scale, Capt Harrison of 403 Field Park Company had the vivid experience, shortly after their arrival in Arakan, of coming across half a dozen local Chittagonians near Ramu with a

huge snake - probably a python - some 12ft long and as thick as a man's arm, draped over their shoulders.

But credit for the tallest snake story must go to Lts John Moss and Peter Whiteley of 98 Field Company. They were sharing a basha on the Taungbro to Bawli road, towards the end of the monsoon. As they came in after work, they found a big snake - five or six feet long - hanging head down from a tree over the basha. According to John Moss "with a fine soldierly flourish, Peter drew his pistol and blew the snake's head clean off. I was just about to say that he should not start to pride himself on such a fluke shot, when we saw another snake the same size as the first hanging head down a yard further away. I drew my pistol, fired and blew its head off. As a record, this must beat riding seven winners on the same day!"

An OC was driving on the Goppe Pass towards the end of the 1944 monsoon when his orderly, Dumman Singh, insisted on stopping the jeep and collecting what looked like dock leaves from the surrounding jungle; "These, Sahib, are a most useful thing (bahut faidamand chiz hai)". At this time pioneers were still clearing mud from the track nearby, and a few days later one was bitten by a snake. At once a Greek chorus was set up among the pioneers:

"He has been bitten by a snake"	"He won't last long"
"It is a most poisonous snake"	"He is looking greyer and greyer"
"Nothing can be done for him"	"It will be a very painful death"

At this point Dumman Singh emerged from the foliage with his leaves and applied them to the moribund pioneer. The patient recovered at once, to the disappointment of the Greek chorus.

An officer went one morning to the mess latrine, a standard four-seater. Soon after he appeared in the mess, pale of cheek and shouting that he had been bitten on his bottom by a cobra. As he got up, a snake had slithered out behind him. As the latrine lid slammed down he felt a sharp pain. He was sure it was a cobra: "we inspected his bottom and saw two angry marks, so we sent for our Indian doctor, who knew about snakes. He was certain that this was not a snake bite, so we inspected the latrine and, sure enough, at one end of the lid handle there were two nails protruding".

Leeches could be unpleasant, but seemed not to appear everywhere. One had to acquire the technique of removing them including their heads - often done with a lit cigarette end.

Personal Accounts

Maj Chartres Baillie, 2IC/OC 26 Field Company

In February, 1942, 26 Field Company, after training for desert warfare, left Quetta for Ranchi. As customary the sappers were the advance guard and prepared camp sites (access, water supply etc) at Ranchi, Kumbi and Lohardaga. Over the next few weeks we had false alarms of moving to Malaya and Rangoon, eventually in April we moved to Comilla and on to Feni. Passing through Calcutta many of the inhabitants expressed great relief at seeing the Army on the move forward. At Feni 14 Div came together. The near battalions were the 5/8 Punjab, 2/1 Punjab and the Inneskillins along with supporting arms and our first mules. We sent one sapper platoon to Noakhali and one forward to Chittagong. At Feni we took part in manoeuvres, organised water supplies and built concrete pill boxes along the railway line and at road junctions. After dust storms the monsoon broke in May and the whole area (rice fields) was under a few feet of water, snakes took refuge in our lines and mosquitoes fed on us. Naturally, the locals were upset at the army taking over their homes, and there was one unfortunate incident where a sepoy fired when locals attacked him for felling a tree and I was brought in to investigate. There was obviously incitement by "freedom fighters", but on the whole relationships were good.

At Chittagong we prepared the railway bridge at Dohazari for demolition. There was a false alarm that the Japs were coming up the Carnafuli and someone told the Jemadar to blow the bridge. Thank God, I met him rushing down to confirm the order which we reversed. We moved forward in December by boat (the Nallard) to Cox's Bazaar and to Ramu where we spread forward on road construction towards Bawli Bazaar and hence Maungdaw. The 81st (Bengal) Sappers leap-frogged along with us between Bawli Bazaar and Naungdaw. There were very heavy rains and half Ramu was swept away by its River. So sudden was the flooding I was cut off while on recce and had to swim back for over a quarter mile, pistol on head and accompanied by two cobras swimming alongside.

"V" Force brought through a contingent of Pathans with the hope they might outwit the Japs by sniping and unorthodox tactics. However they did much more damage to the local villages than to any Japs and were quickly withdrawn. At this stage we were inspired by the news that the Japs had vacated Buthidaung and Maungdaw.

In early December 1942 26 Company spent a week re-assembling in Maungdaw and moved south by mule transport along the coast route. A month or so earlier we had been given a pair of geese to be kept for Xmas; however they became company mascots and paraded with the rest of us and woke up the guard when necessary. Somehow a recce party managed to procure another pair of geese definitely for Xmas dinner and "Old Bill" and "Hortense" were saved. We kipped down for the night near Alethangaw (nick-named Allah-thank-you)

on Xmas Eve and moved forward a few miles next morning, then decided to stop for the day and have our planned Xmas dinner. I sent for the cook and the geese. The geese were brought - drowned. They had been making so much annoying noise on the top of the mule that, while crossing a chaung, he turned over on his back and drowned them - it did not affect the taste. Thence to Indin where we set up Company HQ.

Our major task at this stage was on road and bridge construction and water supplies. North of Maungdaw we had employed coolie labour as extensively as practical. They worked well, the men digging and many women moving the excavation with head baskets. We paid them by measurement, so they left pyramids of unexcavated rock and soil at regular intervals so that the excavation could be measured. There was no indigenous labour at Indin. One platoon worked adjacent to Indin, one to the north and the other progressed south. Our company vehicles had reached Maungdaw and remained there meanwhile until sent for. There was some red laterite in the area which was used for road surfacing, but at this early stage consolidation was done by hand. Bridges were built mainly of Burma teak when available, and I am very proud of the work for there were no failures. Piling, where necessary, was carried out by pulley, weight, guiding rod and manpower. A number of smaller bridges and culverts were constructed of bamboo (muli bamboo about 8in diameter). These carried amazing loads, having incredible resilience and I have a great admiration for the material. (They still use bamboo for scaffolding skyscrapers in Hong Kong). We did erect a Small Box Girder Bridge over a long span south of Indin. The division only had three SBGs and I believe the others would have been erected on the Rathedaung side.

The Infantry had moved through early in January and our OC, Maj LA Thorpe, made a recce on a Brengun carrier as far as Foul Point. That day the Japs appeared at Donbaik and the war changed. We then moved forward to Kodingauk. After the British Authority had departed there had been violent fighting between the Naugs (Buddhists) and the local muslims and all the houses at Kodingauk had been burnt to the ground. Two platoons moved further forward on road works, water supplies and general support including Forward Aid Posts. We worked well alongside the RAMC and I was several times called to assist as "anaesthetist" to Colonel Marshall (surgeon). A rubber tube extended from a gas jar into the wounded victim's nostrils. There was a gauze over the jar opening. When the Doc nodded his head I poured ether over the gauze and when the patient passed out the tube was pushed right down to his lungs. Every time Marshall's head nodded I sprinkled more ether. In the hole in the ground on a bamboo table I witnessed some amazing operations.

Of course we were sleeping in slit trenches, mine with a tarpauline stretched over it. Hortense, our goose mascot, laid some eggs under the tarpaulin. I was very unpopular when I ate one of the eggs for breakfast. She laid more and sat on them. Our daily report to Div HQ stated that "this Company will not be in a

position to move until the operation was completed". Three goslings survived and joined the Company.

Our Sikh platoon was over near Hyinbu on the east of the Nayu Range, where they were subjected to an attack from shelling and we lost two sappers. At about this time the gunners from our side of the Mayu Range attempted to shell a Jap position at the foot of the steep slope on the east. They had to loft their shells very vertically so that they dropped close into the hill base. Unfortunately they hit their own Observation Post which was high up and in line with their target - with casualties.

The Infantry were facing the Bunkers at Sugar 4 and Sugar 5, small hillocks north of Donbaik. Daily a Jap recce plane roared above with no opposition. Then pattern bombing started. A formation of Jap bombers would appear suddenly from the east over the steep Mayu Range, we did not hear them before they were ready to drop their bombs and down they came. We had no wireless communications at this stage in the Burma Army. After a few weeks some AA guns arrived. We waited with apprehension next morning. Over came the Japs, the guns fired, one plane came down, the others fled and the pattern bombing changed to individual planes. They tended to drop one heavy, high explosive bomb and one shrapnel bomb together. I jumped into a slit trench and the bombs dropped within a few feet, I was knocked out and the trench collapsed over me. The branches of "camouflage that was", was in flames. I came to with my legs burning, pulled out and stumbled for further cover leaving my pith helmet behind in the trench. The bombers departed and some of the company started "digging me out". When I walked up behind them they saw an apparition.

Our own Hurricanes were seldom seen. We understood that the Jap Zero could out-manoeuvre them and our pilots' instructions were that if they were above the Zero to dive and fire, then make for base. Our bombers also made a few sorties to the Donbaik area. On one occasion a Zero chased two back along the beach, we opened fire on it by Bren-gun (not the heaviest weapon), it turned immediately and went for home. We must have hit something or somebody.

At Kodingauk we had a letter handed to us by a local from Chandra Bose to say that he had inspected our positions and they were completely inadequate. I made a recce to try and discover a possible transport route over the hills to Myinbu. It was impossible. I followed an elephant trail near the ridge and came to a point where the elephant obviously sat on his bottom and slid about 200ft down to a track below. The navy appeared. A small battleship sailed up the coast and open fired on us at Kodingauk. Fortunately no casualties. General Lloyd visited us twice, a morale boost, explained our predicament and admired our genuine teapot. I had great respect for him as a communicator at all levels. On an earlier trip to Calcutta I had bought an HMV gramophone and six records including *Max Miller in the Theatre*, *Eine Kleine Nachtmusik* and *William Tell Overture*. The latter unfortunately was left under the ribbed tray and became

dented with the heat, resulting in an unorthodox rhythm when played in our hole-in-the-ground. Max Miller jokes were included in our general conversation.

Our first two bulldozers appeared - D4's, the first the Army had ever seen. They obviously made a great difference to the speed and quality of road and other constructions. It became obvious that the Jap 75mm field guns had a greater range than our 25pdrs, efficient though they were and also the Jap heavier mortar out-ranged our 3in mortars, and both proved to the Japs advantage. The Jap bunkers north of Donbaik, in fact the front line, were never penetrated and gained a reputation to the great damage of our morale, increased by the fact that you could never see the enemy and they appeared immune to shell and mortar fire and even bombing. When I crept forward to see for myself (in the hope that the Sappers could suggest any alternative form of attack) I was fired upon immediately I raised my head over the slit trench.

In late January or early February our Mahratta platoon rendezvoused on the shore north of Kodingauk with landing craft and tanks to get them ashore. The eight Valentines moved south at night, crossing the chaungs at low tide as our heavy transport did before the roads were constructed. The planned attack on the bunkers proved another shattering blow to our morale, some plunged into large ditches or holes and could not move forward. Of the two I saw closely, a mortar bomb had hit one to the rear of the turret shattering the engine and radiator and the engine seized, the other had a perfectly aimed anti-tank shell through the running joint of the gun turret, the gun could not swing and I believe the gunner was killed. It was obvious the Japs had been fully prepared for the attack.

The Japs crossed the Mayu Range behind us and in April we were on the retreat. We circled north a few miles and set up a defensive position in a narrow chaung. As this was at right angles to the hills we found we could be easily machine gunned from the heights. We moved further north and were subjected to shelling of the transport, the only casualty - a PM whose bowels gave way under fire.

Our next Company position was on a higher site near a predominant peak nearer the sea we knew as the "Pimple". Two of our platoons were forward, one protecting the rear of an Infantry Battalion at the narrow entrance of a cleft into the hills. They were surrounded and contact was virtually cut. When the retreat continued they managed to evade direct confrontation and come round by the shore. Lt Derrick Oxley, Platoon Commander, received an MC. Unfortunately one of our best Havildars, Mohd Din, was sent to inform the Inneskillins of the Jap position; he was mistaken for the enemy and shot dead.

From our position at the "Pimple", which we felt was a strong defensive post, but never tested, we witnessed the attack and shelling of Indin and the counter attack by our guns and bombers when the Brigade Commander, Brig Cavendish

and others were killed. At this time we also witnessed what must have been the first parachute supply drop in Burma. The Japs occupied a nullah in front of us but were soon heavily bombed and strafed by the RAF. Successfully, according to the count of vultures over the next few days.

At our next move we were surprised by a visit from our Commandant from Kirkee, Colonel Cavendish, again a boost for morale. We had one further organised retreat in May and were relieved by a sapper company of 26 Ind Div and with a mixed feeling of fatigue, relief and conscience, found ourselves back at Maungdaw, then by the Naf River to Tumbro where we were treated at the improvised staging post as deserving heroes and thence back to Chittagong. What to do? Clean up, patch up, iced drinks, how do you talk to other people? General Irwin had a word with us and seemed pleased we were drilling the Company to smarten ourselves up, but I don't think either he or we were impressed. We stayed in railway buildings very dangerously. The thunderbox opening was facing a high wind and in the confined space I found myself dodging high flying contaminated toilet paper. We returned to Ranchi where I now found myself in command of the company and, though last to go, a leave in Gulmarg.

I have heard much of the low morale of the 14th Div and their capacity for retreat. I can recall no occasion of retreat except under orders. We were facing a very experienced enemy whose morale was extremely high having swept through Asia with the minimum of resistance. (The situation was entirely the reverse when we were crashing down to Rangoon). News was coming through of discontent and rioting in India. We were marginally inferior in weapons and organised attacks on Donbaik were more reminiscent of the Somme than jungle warfare. The comrades we left behind were not guilty of cowardice. When 6 Brigade (four British Battalions) appeared we had hoped they might swing the balance and boost the British image among our Indian troops. This was not to be, and made it more difficult for the British officers to inspire their sepoys. The longed for turn of morale came at the Admin Box, Ngakyedauk, but too late for 14th Div. At this time, of course, British forces were in the African desert, we heard of certain successes and the superiority of the RAF etc. This was of little consolation when we had not the same weapons, planes or supplies. It was embarrassing to explain to one's Indian Officers why the defence of India was of less importance than the defence of Britain. After all in 1943 the war with Japan had been with us for over a year.

Malaria took a major toll of both health and morale. There was NO quinine (the only then known antidote). Having captured Malaya the Japs appeared to have cornered the source of quinine. Almost 100% of the troops suffered. In our own company, two of us, Maj Thorpe and myself appeared to be immune - neither smoked?

Earlier in the Indian Army there had been an imaginary line set up between Regular Officers and Emergency Commissioned Officers (ECs) and a round letter from General Wavell had to be read out to all, stating that Regular Officers were obviously going for "kushi" jobs and the Army was gaining from the broader experience of the ECs who were giving so much to the cause. It must have been hard for Brig Wimberley to read this out to us, as his own unit had two messes, one for the regulars, who organised the drink ration allocations and one for the ECs. After sharing the strains of warfare we found the artificial differences had disappeared.

Stan Lawrence of 1 Platoon 28 Field Company -The assault and capture of Ramree Island

The long column wound its way northwards out of the Goppe Pass area. No 1 Platoon 28 Company were moving out. The whole platoon was there from Jem Fazal Hussain down through all the NCOs and sappers, the Khans, Ahmads, Mohds, Dins etc to Gharib the barber - all keen, eager and excited for the change. We knew that there was an importance and urgency about this move. We learned we had been selected to be engineer support in amphibious combined operations to secure Jap occupied Ramree Island to establish a supply route for 14 Army attacking down the middle of Burma. It was to be the largest combined operation of its kind.

On the way along that brick surfaced road to our first stop at Chittagong we were called upon to prove our experience and skills. We arrested the movement and anchored two centre bays of a multispan bridge which were moving downstream due to flood waters. It was a night-time task with steel wire ropes anchored to the banks on either side. The five foot king remained in the bridge for some time.

We proceeded into India by boat and train to Coconada for intensive training. The platoon had to be pruned of all unsatisfactory personnel to be in first class condition. We worked and played hard during those weeks. I remember surfing in on huge rollers whilst the lads battled one another on the beach to get the ball across goal lines in games without rules.

The termination of training included passing on equipment, stores and vehicles which were not needed for the operation ahead. A large amount of explosive equipment, nearly half a ton, was loaded into a 15cwt truck and driven down to the beach. Gun cotton slabs, tins of ammonal, plastic packages of 808, coils of primacord, boxes of detonators, fuse wire etc were all buried and blown up. All our vehicles were driven in a convoy to a vehicle park.

The SS *Nevassa* was the Landing Ship carrying the LCAs which each held just over 30 men. We clambered down netting from the deck into the LCAs. There were eight of these in the 'H' hour flight, three of which contained

men of No 1 Platoon. There were five in each. The remainder of the occupants were infantry - mostly Lincolns but some 19 Lancers (Ind). My small party in each LCA had at least one sausage shaped elongated plastic explosive for blowing gaps in barbed wire barricades found on the landing beaches. Everybody carried very heavy packs because they held all the necessary stores needed for the landing and several hours after.

'H' hour was under a brilliant blue sky on the morning of 22 January 1945. Down the nets and into the LCAs to chug that mile or so to the beach. We had a clear view of our supporting bombers coming in from the right and the explosions as they dropped their bombs on our target town of Kyauppyu. Other smaller planes also attacked from the right. At the same time shells whistled overhead from supporting naval vessels way out of sight over the horizon. Minds were taken off all this action when one of the LCAs in front of us erupted and disappeared in a cloud of smoke and spray as it unfortunately struck a mine. One of our first tasks on leaving the beach area was to check the airstrip for possible mines - aerial photos had indicated unidentified unusual marks needing investigation. They were found to be mines composed of buried aircraft bombs each topped with a vehicle mine for detonation. We carefully ringed them all with our white tracing tape as there was no time for us to disarm - that would be carried out by others of the platoon following later on. We had our main task to stay with and support the infantry as need be as they pressed forward.

That same night I was detailed by Capt Henson, our company 2IC, to recce and ensure the track ahead of the Lincolns was clear of mines and adequate for the lightweight Jeeps. It was normal for a small infantry protection party to accompany us on forward activities of this nature. This procedure allowed us to proceed confidentially with our engineering tasks without having to provide our own cover and protection. We had cause that night to bridge across a small river bed with high banks, resulting from monsoon waters. In this case adjacent small trees were felled and used to construct a strong enough bridge.

Sad news awaited my small party on return in the following morning to find that Capt Henson had been shot and killed during the night by a party of Japs who had broken into the billet and quickly ran out shouting as they went. Capt Bewlay took over as 2IC. We were to find that this noisy type of night-time foray could be expected from the Japs as they were being pushed back down this side of Burma. They generally remained hidden awaiting an opportunity for some form of disrupting action. A few days later following the use of a small bulldozer to provide an access track for infantry to secure a small tree covered hill, one of my parties ran over a vehicle mine on the return after cutting this very track. It was still daylight and only a few hours after clearing the trees and vegetation for the track. The mine, which damaged a front wheel, had been placed in that short period of time. I must have missed it with the motorcycle I had been using.

Because of this form of 'hide and seek' withdrawing action of the Japs, it was necessary for every unit of whatever size to provide all round guards and protection after dark. Out in the open this would entail digging slit trenches for the duty guards. Such a night-time scenario confronted me when I was caught out between units when that m/c broke down as I was returning to my platoon. With the byke abandoned that mile or so's walk in the dark through bushy sandy scrubland, was extremely nerveracking with my imagination placing Japs behind every bush. What a relief, after about an hour's trek, to hear a clear shout out of the darkness from an English voice 'Halt - who goes there?'.

The chaungs and waterways at times needed to be seen to be believed. Recce-ing a proposed route one day we found to our surprise that a few miles upstream the waterflow had completed disappeared. The next day, when accompanying a forward group we were pinned down by mortar fire at a river where crossing would necessitate work by the platoon's party in ramping down the 4 to 5 foot banks to get the vehicles across. A few words with HQ and the Brigadier had taken my advice to move on down to a dry crossing that I had reced the day before. Maybe that mortaring was my own fault, as I remember we had been under fire on the way back the previous day. Especially as I had been admonished for radioing through to 'get some cha ready'. The Japs could have picked up the careless radio call.

Those buried bombs we had found on the Kyaupyu airtrip appeared more than once as we moved on, apparently they were RAF bombs which had been acquired by the Japs. They were 250lb three feet in length. When we were engaged in searching and removing mines along a certain stretch of roadway, my havildar, Mohd Sadiq and I were a few hundred yards ahead of our party of half a dozen sappers strung out in a line across the track, prodding with bayonets fixed to their upturned rifles. Suddenly a loud explosion broke the silence. As there had not been any supporting fire from the warships standing off shore we decided to dash back along the track. A grim sight presented itself. Spread across the sandy track around and within a crater measuring about 10ft across was the result of a jeep being blown up on one of these buried bombs. A leg with boot attached - the top half of a body cut off at waist level - the two wheeled front half of a jeep - and wandering around dazed amongst all the debris was a person bare from the waist upwards. My naik who was in charge of the prodding party explained that an English officer in the jeep had come up behind him and insisted that he must go through as he was urgently required to find a suitable Auster aircraft landing area. On being told about the mines, he got out to walk ahead of the jeep. He could have walked on or over the vehicle mine but the weight of the jeep had activated it and the bomb under had been detonated and the explosion had caused that horrific damage.

We had very little knowledge, during the advance down the island, of the division's plans except for the main objective to reach Ramree Town and to clear the island of the enemy. This was of little concern to the platoon as we

were kept busy all the time with our duties as support sappers. I acquired our own interpreter to provide us with day-to-day background knowledge particularly concerning the whereabouts and movements of the Japs. It considerably raised the spirits of the platoon when I suggested that we took this local, whom they had befriended, along with us. They had surprisingly bumped into this civilian who happened to be of their religion and caste. I seized the opportunity to ask him to join us and much to the delight of the platoon, he accepted. I fitted him out in a uniform and agreed to pay him a small amount a day.

It was necessary at a certain stage in our advance down the island to establish water supply for the brigade. We tracked down, with the help of our interpreter, some springs in the side of one of the few hills in the area. We cut gullies down the hillside to guide this fresh water into our standard purpose-made canvas pool containers. These were ten or twelve feet in diameter and couple of feet deep and self erecting as the water level rose. Our water testing equipment was put into use and chemicals added to ensure the water was safe for drinking.

'Unusual objects' reported for our attention had been spotted on a beach used for access on the move southwards.. They appeared to be a form of anti-invasion mine which could have been laid by the Japs. I had never seen or had experience of these hemispherical steel objects with their two large projecting horns. With a long line from our 15cwt it was easy to ascertain that any force against either of these horns (about 6in by an inch or more in diameter) exploded what was obviously a very powerful mine. Sending all to a safe distance I took my time to investigate the next mine along the beach. It was two feet indiameter with lead horns secured into the outer case by large projecting hexagonal nuts. After struggling with a large adjustable spanner I discovered they were left-hand threads. The horns contained chemical filled glass tubes which if broken activated electrodes to fire the detonator. Back at my base we dug a trench and burnt one of the mines out - after defusing of course. Gun cotton can be set alight and will burn merrily - it needs detonation to explode. We sent back some usual information about this mine which weighed over half a hundredweight.

Nearing Ramree Town at first light one morning myself and a line of my sappers were the first to break cover from our shielded wooded area into the open sandy expanse of the road junction. A chaung bordered the track to the right and wooded hills rose up either side of the track, branching off to the left to our objective. Our orders were to check for mines as a tank, the one and only around at the time, had been brought up to assist in the renewed attack. Our slow progress in line, probing with fixed bayonets, in that hundred yards to the junction came to an abrupt stop when bursts of machinegun fire threw up spurtssand around our feet. The only cover were the 18in high irrigation bunds of the paddy fields alongside the track junction. I remember lying behind that meagre cover looking sideways across to the watching fellow troops in the

wood which we had left and noticing the nose of the tank which had arrived. As enemy mortars began to explode in front and then behind us it was quite a relief to see the tank emerge and rumble towards us. As it came to a stop in front of us pointing up the Ramree Town track I noticed its external telephone. Although new to me I thought why not use it? It worked and I instructed the tank commander regarding the direction of the Jap's firing from the right-hand hill and requested a burst of firing to allow us to double back into the chaung. A shouted order to my lads to 'move like hell' back into that chaung at the very moment the tank opened its firing. It worked, leaving us a little wet but behind the protection of a five foot vertical bank of the chaung.

It took the Lincolns the whole of the day to wrestle that hill from the Japs during which time we made ourselves useful stretcher-bearers the wounded. The remaining few miles to Ramree Town was covered without opposition. Seeking out suitable billets for the platoon and company HQ was priority.

It was not long before our duties assumed an entirely different phase to that of accompanying forward troops. We became quite static and were involved with activities of a different nature including the work of making the town's docks operable following demolition operations and road surfacing works in anticipation of monsoon weather. Large quantities of river gravel from local dried up chaungs were needed for the road surfacing. 3 ton lorries were used to ferry the gravel to the various sites. I devised a quick and satisfactory way for loading the gravel. A row of substantially sized trees were cut down and pile-driven across a dried up chaung bed and wired together as an imperforate retaining wall about 6ft high. It was then staked and wired back to take the thrust of a ramp of gravel bulldozed against it. Now complete, further gravel was bulldozed up and over into the lorries as they pulled in alongside.

No 1 Platoon was good and efficient and, whatever the task, I could depend on them to get it done and do it well. I was proud of them! I think they were also proud of me and with the izzat accompanying my mounted officer image on Sapper, a horse left by the Japs, which I had acquired. I must admit that it did give lowly 'lieutenant sahib' rather a lift to be able to look down upon the Brigadier when acknowledging him with a salute when passing.

At that time we had to tackle a job of cutting off metal jetty stanchions of demolished structures which were obstructing the proper use of the docks. We managed to cut them off with plastic explosive charges about ten or more feet below the surface. A five gallon drum was adapted, together with a gas mask, to supply me with air to allow me to remain under water for the time needed for these tasks.

There was plenty to keep the platoon occupied now the Japs had been cleared from the island. Buildings to be demolished and an area cleared and prepared for landing aircraft. It was interesting and also satisfying deciding on

the critical load bearing members and thus using the minimal amount of explosive. I remember a spectacular collapse of a temple, which unfortunately had to go. All we used was one of some purpose-made assault charges for blowing up occupied bunkers. They were half moon shaped, weighing about 7 or 8 lbs and carried on landings in a back pack. Placed and exploded at the small observation slits of a bunker they constituted a deadly weapon. One of these was all that was necessary to remove the critical load bearing column.

In the same way we had been selected for the Ramree secret operation, we were moved away to the north part of the island to prepare for another amphibious assault on Rangoon. Training and preparation followed but by this time we considered ourselves old hands and experienced. We left Ramree Island in late April on the HMS *Persimmon*, the assault landing ship, carrying the LCAs for the Rangoon operation, codenamed DRACULA. Monsoon and storm awaited the platoon's night-time net drop into their LCAs and subsequent long and vulnerable trip up the Rangoon River and estuary.

P F Whiteley 98 Field Company

98 Company moved to the Arakan in March 1943 without me, detained in Poona with malaria. There followed a tedious cross-country journey by train, ferry and train again to catch up with my Mahratta platoon just before the company moved forward to Bawli Bazaar. Of the journey I mainly remember a very hot and dusty afternoon in Bengal: a reserved first class coupe to myself, my bedding roll spread out on the lower bunk and myself, naked save for a sheet, sprawled thereon. A wayside station in the middle of nowhere: no need to rouse oneself; the door is flung open by seven teenage Indian schoolgirls who enter, shepherded by a white nun. The door bangs shut and we are off. Clad only in the sheet, and such dignity as remained, I retire to the lavatory, get dressed, and summon up the courage to return to face them in the compartment.

The outlook, when 98 Company reached the Arakan, was uncertain. Following the defeat in Burma and the long string of Japanese successes further east, the first attempt to regain territory, 6 Brigade's drive down the west coast of the Arakan peninsula, between the Mayu range and the sea, had failed and turned back. There was no defeatism but neither were we so optimistic as to expect quick results. Air superiority, which we later came to take for granted, still rested with the Japs. Their Zeros harassed our convoys, sometimes at very low altitudes, and their bombers bombed at will, albeit there were not enough of them to seriously threaten the allied build-up through Chittagong, Comilla and Cox's Bazaar.

Air superiority changed hands one sunny morning when the first Spitfire squadron went into action at Bawli Bazaar. We watched with the detachment of those not targetted, a group of 20 plus twin engined Japanese bombers fly past at about 20,000 feet in the direction of Chittagong or Comilla. Contrails then

appeared above them until the Spitfires broke and dived on the formation. In moments the sky was full of smoke and debris and we watched six machines falling together. The remaining bombers turned away seawards and the action moved out of visual range. That was the last time I personally saw a Japanese plane in the air during the war in Burma. One heard them at night, but in daylight the sky belonged to the RAF/IAF. There were times when our own air force was pretty dangerous, but that is another story.

At that early date the division was still raw and fire discipline not yet established. So took place the 'Battle of Bawli Bazar', of which proud claims will not be made in the division's history book. Firing broke out one night about 10 pm and swelled quickly until it seemed that the entire Brigade, assembled south of the town, must be under attack. The commotion died away over the next hour or so, but we passed an uneasy night. Daylight revealed the truth. A sentry, overcome by the common and persistent night illusion that a stationary object is approaching, had fired at the menacing stranger. Everyone quickly joined in and it was really quite surprising that the object in question, a white milestone, suffered so little damage. It was afterwards alleged that 100,000 rounds of ammunition were fired that night. If so, the lesson was probably worth it. I cannot recall the Brigade so indulging itself again.

The next major move for 98 Company was by mule over the Goppe Pass, tasked with building a mule track from the Pass to Goppe Bazaar, where the valley of the Pairwan Chaung meets the Kalapanzin River. This was our first serious monsoon experience and we had much to learn. Camp was established on hillocks where the first flat valley bottom penetrated the Mayu range, providing space and grazing for the large number of mules with which we moved. Local coolies built a few small bashas for the mess and stores. On the hillocks, which we would defend if necessary, bamboo platforms about 6ft x 4ft were erected close to the waterlogged slit trenches of the defences. These platforms each provided sleeping accommodation for two men and were roofed with their two groundsheets. Officers had similar, slightly larger platforms with thatched roofs.

And how it rained. There was no way ever to be really dry, for despite the rain it was hot and humid and the sweat generated by any waterproof covering soon made one as wet, and much less comfortable, than the rain itself. We envied the oval rain-shields, woven of palm leaves, under which the peasantry sheltered as they worked their fields, looking from a distance like large beetles. Rations were adequate for our Indian troops, but dull and limited in our small mess of British officers. On forming up at Dighi the mess had benefitted from the skills of one Munaswamy, a small, frail looking Tamil, as cook. When sober he was pretty good, but he was no warrior. He stayed with us until it was announced that we were to cross the Mayu range, when he disappeared for good. It takes a real cook to produce appetising meals from bully, Shakapara biscuits, jam and tinned beetroot, which is about all I can remember of our daily fare, even when supplemented by Indian rations from the platoon cookhouses. Fresh bread, for

which I craved, was a rare treat. When it did appear, one cut a slice and tapped it on the table to encourage the migration of the live weevils and their young which were always abundant. There was little or no local produce to be had, not even fruit, but the Arakan jungles are home to the red jungle fowl. You cannot use a .303 SMLE on a jungle fowl - there is nothing left if you hit one - and we had no shotguns. Happily a Japanese rifle fell into our hands early on and, with that smaller bore, I did manage to supply the mess with the occasional treat of roast chicken.

Those six weeks on the Goppe Pass were a vintage time for 98 Company. Morale was high, the bulk of the Company was engaged on a single purposeful task and sickness was almost non-existent. All good things come to an end however, and our sojourn at Goppe duly ended with the mule track complete, including a notable skewbridge, built by Doug Elbourne's platoon, which he named, *pace* Charles Dickens, 'Ell-uva-Twist'. It ended, too, in some disorder. We were to march off at 0930; our mules, fresh and rested from 6 weeks at grass, had different ideas. As fast as we loaded them they bucked off their loads, bolted, rolled and generally created mayhem. By the time the column made a move noon had come and gone and the CO's fury threatened apoplexy.

The return across the Mayu Range was uneventful but revealing of the very difficult problem of road building in an area devoid of sound rock. The mudstone of which this range was largely composed was easy enough to work when dry, but if allowed to soak up water it quickly reverted to mud. In places very steep, the backbone of the range was well protected by the dense jungle cover. Remove the cover to build a road, and what in the dry appeared to be solid rock, if soft, could dissolve before one's eyes. I have a vivid mental picture of a bulldozer coming down the track of the new vehicle road being built up the western side of the range, its blade pushing before it a 2ft high wave of liquid mud to cascade down the Kilud at the next sharp bend.

We were not to enjoy our sickness-free state for long. Mepacrine was not yet used daily as an anti-malarial prophylactic and Paladrin had not yet reached our hospitals. Fever hit us hard, with dysentery and jaundice to complicate and delay recovery. I remember that at one stage the company was down to 32 effectives, and I don't think we were the only unit in like state. The division was said to have sustained 150% malaria casualties in 3 months.

Communications up and down the peninsular were almost impossible during the heaviest of the monsoon rains. The millions of bricks used to surface the principal roads were well enough in fine weather, but road foundations were scanty or non-existent and brick roads quickly became broken, rutted swamps when it rained in earnest. A 30 mile journey by motor cycle at the height of the monsoon took 10 to 12 hours. It was easier to walk.

I was in Dacca hospital with a combination of malaria, jaundice and amoebic dysentery plus for a couple of weeks, plus the foul affliction known as dobhi's itch. By the time I returned to the company, now back near normal strength and a whole lot wiser and more disciplined as to the problems of malaria and dysentery, the 7 Div battle, the so-called 'Battle of the Box' had begun. 26 Div was ordered across the Mayu Range, in the case of our Brigade via the Goppe pass, to drive down between the range and the river towards Buthidaung. We were to relieve 7 Div and, eventually, to re-open the Nakedawk pass which had fallen into Jap control before Col Tanahashi's force was stopped and defeated, mainly by 7 Div.

The Battle of the Box was a welcome victory after successive failures and retreats, but it was more than that. It demonstrated an answer to the Japanese tactic of encirclement and blockage of LsofC. It demonstrated that air power had come to stay and could supply troops who held their positions until the enemy, who had cut off their land communications, in turn faced defeat as their own supplies ran out. It was the model for the greater defeat inflicted on the Japanese at Imphal.

While in reserve before being drawn into the Battle of the Box in February, 26 Div was under orders to fly into central Burma in support of the second Wingate expedition. Much time and thought went into stream-lining the company's tools and equipment to reduce weight. Very detailed loading tables and schedules were drawn up. This exercise seemed wasted at the time, but it was not. The training stood us in good stead in the later planning for the invasion of Ramree Island by sea and the rather hurried combined operation which resulted in the re-occupation of Rangoon.

For 98 Company the first significant stop on the road south in support of 7 Div was at Goppe Bazaar. This area comprised low foothills on either side of the long finger of paddy fields through which the Pairwan Chaung flows to join the Kalapanzin River. Here the Brigade established a 'box', defending the low ridges and blocking the connecting stretch of paddy, about 250 yards wide, with a barbed wire fence and, in the centre, a gate. In normal dry weather the chaung was a 10ft stream a foot or so deep running in a deep, steep sided bed cut through the fields. Then one day it rained unexpectedly and heavily. Sixteen inches fell in 12 hours. The chaung soon overflowed its 8ft deep nala. At the height of the flood the valley was filled from side to side, 5ft deep in the middle and 3ft where it lapped our positions on a small ridge on the north of the valley. One of the Sikh section's jawans was later decorated for rescuing a man who had been swept into the barbed wire where he was in danger of drowning.

During the weeks that followed the Company moved with the Brigade forward to the outskirts of Buthidaung, often in a defensive infantry role. Mine laying and booby trapping, road building and general engineering duties occupied our time. However, one night in November/December I was ordered to take an infantry patrol across the Kalaparzin in assault boats, wait for them on the far bank and

bring them back before dawn. With 3 assault boats and 8 or 9 men of the PM platoon we duly crossed the river - here about 60 yards wide after dark. The patrol departed and we drew up the boats and settled down to wait in a shallow ditch. By 1 am we were probably all half asleep because the lead scout of a small party of Japs, walking quite openly across the paddy, was no more than 12 or 15 yards away when I saw him. There was a brief outburst of firing and we followed up the retiring party for about 150 yards, killing 2 of them.

Sometime during this operational season the PM Platoon was ordered to build a mule bridge over a substantial chaung running through low-lying paddy fields. The gap was about 50ft but the bottom was soft mud and we had no time to build and set up a pile driver. We therefore constructed 3 trestles of fairly heavy timber and at the base of each spiked on a wide and heavy crib of solid timbers (about 8in x 8in). These trestles were then floated into position and sunk by being loaded with sandbags. The resulting structure was somewhat uneven - the capsils of the trestles were all at different heights and leaned to one side or the other. However, the bridge was perfectly good for mules and we left them to it. Four weeks later, back in the area, I watched in horror as a gunner unit towed four 25pdrs over it - safely.

By this period of the campaign we were well served by L5 aircraft used mainly to evacuate casualties. I do not remember if it was 98 Company's doing, but in the absence of purpose-made airfield surfacing materials a L5 landing strip 400yds x 16yds was surfaced by local labour with a single woven mat of split bamboo. Something for the Guinness Book of Records perhaps?

The withdrawal to Bawli Bazaar into monsoon accommodation, which soon followed, I remember chiefly for one of those avoidable accidents which so often cause unnecessary casualties. We had been issued with anti-personnel mines in which a small, cylindrical fragmentation grenade, buried just below ground level, was triggered by a foot stepping on a round plate set at surface level. The safety device was a light metal spider preventing the metal plate being depressed. The spider was designed to crush under the weight of a man. This device was crude, unreliable and unsafe and the company was ordered to return its stock to Ordnance for disposal. They were packed 12 mines in a wooden case and, while carrying a case from our store to a waiting truck, two Sikh jawans managed to turn it upside down, resulting in the lid becoming detached and a shower of mines landing at their feet. Five exploded, killing both men and wounding others, including the driver of the truck, next to whom I was sitting, whose jugular was pierced by a small piece of shrapnel. He survived and recovered.

Early in September the company again moved forward to Goppe Bazaar. I was in hospital when they moved, recovering from a sharp attack of scrub typhus. Little more than a week after rejoining the company, recovered but far from fit, occurred the incident referred to in the 6th October war diary. The party

comprising Jem Abdul Aziz, five sappers and myself, left at first light on a misty morning. A mile or so north of Goppe Bazaar we saw a body of 50 or 60 men in close order moving south who, as they were following a line to the west of our route, would if hostile soon cut us off from the defences of Goppe. No report of own troop movements in the area was contained in our briefing so we were suspicious and halted to watch their progress. By the time the mist allowed us to identify them as Japanese, mainly from the large packs they carried and their bent-forward way of walking, they were uncomfortably close. I ordered a return to the Goppe base and we set out at the double, hoping to be in time to warn the defences of trouble approaching.

We took a line close to the river bank but progress was slow because I was unfit. We soon came under fire from across the river and Nk Maula Baksh was badly wounded. We were then right on the edge of the river in partial cover, mainly thin grass. Jem Abdul Aziz and two men were then deputed to fetch a sampan from the anchorage just outside the Goppe Box, but by the time they reached the area it was already occupied by the Japanese and they were fortunate to find their way unharmed into the perimeter. Meanwhile the remainder of the party lay up in the knee-high grass of the river bank, being shot at occasionally by the hidden sniper across the river. Eventually he showed himself and was driven off. As the hours passed Maula Baksh died and we were stumbled upon by a friendly young villager who even brought us some food. At first dark we moved off towards the Box but quickly ran into patrols and were fired on. One sapper became detached and was later picked up wounded by a Green Howards patrol. The Bren gunner, Spr Dadan Khan, and I were forced over the bank of the Kalaparzin, here 3 or 4 ft high, and on to the long slope of soft mud which led down to the water. We lay there 12 or 15 yds out from the bank, listening to the Japs calling to each other as they searched for us. Eventually a grenade was thrown, landing right alongside Dadan Khan, killing him instantly and blowing his body on top of me. I was unharmed so when, seconds later, the grenade thrower appeared against the skyline, it was easy to shoot him. As I reloaded a second Jap appeared, peering down the bank in search of his comrade. When he fell on top of his friend, the remainder moved off. I then crawled into the river and drifted downstream to the landing point opposite the Box. When I arrived there was nothing but one or two dead Japs, so I climbed into a sampan and waited, shivering partly from cold, for dawn. Thereafter, from the shelter of a pile of timber 60 yds from the gate in the wire, it took 40 minutes of increasingly coarse invective to persuade a suspicious Green Howards piquet to let me in.

Amongst the most interesting experiences of my time in Arakan was to take part in a month-long patrol sent up to Lungleh in the Lushai Hills north and east of Comilla. The party consisted of five British officers, of whom I was the sapper representative, with an escort of five BOR's headed by a sergeant. The task was to ascertain what would be involved in moving a large body of troops to Lungleh should the Japanese threaten the area. Lungleh is in the hills, the remote

and seldom visited headquarters of the district. It is approached first by river and then by a precipitous jungle trail, crossing ravine after ravine on suspension foot bridges, some with wire suspension cables, some relying on lianas. The country, once one leaves the flat lowlands inland from Comilla, is dense and hilly jungle. The further inland one goes the taller and denser the cover, and in places the country is very steep indeed.

We reached the river after a 30 mile drive and march, and embarked in khistis. These are large dug-out canoes, with the gunwails heightened with planks, and are covered almost from end to end with a hooped canopy of woven bamboo. Where conditions permit they are propelled by two men who walk up and down the canopy using long poles to punt the boat along. After 3 or 4 days in the khistis we reached a point where the river became too fast to navigate. The country on the left bank where we were bound became very steep and the climb into the hills began. We carried a month's supplies and needed porters whom we were able to hire from the occasional jungle village on our route. The Lnshai people lived in well-made bamboo houses and practised slash and burn agriculture, clearing hill tops to plant rice and moving on as the soil degraded. Villages were small, 10 or 12 houses and were few and far between. The track was often ill-defined and was little used.

The patrol had been given money to pay its way and also a supply of raw opium to which the hill people in this area were said to be addicted. This information was correct. Apart from small sums paid out for fruit or rice, we paid our way entirely with small pellets of opium. Five cigarette tins more than sufficed for the trip. We had been told that Japanese patrols might be encountered so had to proceed with some caution until we reached Lungleh, where a 'V' force unit, under the command of a flamboyant young British Officer had up-to-date and reliable information. The journey to Lungleh took twelve days and we spent another four in Lungleh and the surrounding area (including one extremely good party with the V Force people and local nabobs, one of whose Indian-educated, English-speaking daughters provided the V Force commander with an extremely attractive girl-friend).

The journey back was more exciting, at least for me. To the right of the descending track from Lungleh there ran a river, a narrow tributary of which cut the track. The river itself was a tributary of that by which we had travelled and Sangam was about 10 miles above the point to which the track descended. There was rumoured to be a passable track paralleling this river and I set off to see. Two locals took me down the tributary stream for 3 or 4 miles. It was an exciting ride in a dug out canoe scarcely wide enough to sit in: white water most of the way and a steep fall from track to river. On the river bank I dismissed the canoe and set out on foot. Within a quarter mile it was clear there was no track. Much of the way, the bed of the stream was bordered by steep cliffs and the banks were impassable. I climbed round the first cliff, but within half a mile faced another, quite sheer and at least 150 ft high. The opposite bank looked no

better. By the time the second cliff face was bypassed evening was approaching and a third cliff loomed. I decided to abandon the attempted route and climb back up to the track, 4 or 5 miles distant and at least 1000ft above me.

Quite soon it became clear that I was in trouble. The undergrowth was thick and the canopy mostly prevented sight of the sky. I had a ¼in map and a compass, but map reading was difficult, with visibility nowhere more than 50yds and the mountain side was far too precipitous to maintain a compass course, or even to pace distances effectively. It was hot and humid: I had no food, and soon realised I was lost. By nightfall I was really worried. The jungle was full of leeches - one could see them humping towards you whenever one sat down - mosquitoes were plentiful and I had no blanket or mosquito net. It was difficult not to panic and over the next 2 days I sometimes had to stop, sit down and take a serious pull at myself. Water was hard to find once one left the river behind and thirst was a real problem until I discovered by accident that a certain type of thin-walled bamboo growing in the plentiful ravines contained water within its shell. On this I subsisted until the end. After the first day and a half hunger was also a problem. We had been given no training on surviving in monsoon jungle and the nearest I got to a meal was a snake, but it escaped into rocks. Eventually, on the third afternoon, I heard distant small-arms fire, which persisted. Very cautiously I made my way towards the sound, hoping that if it was an attack on a Nepalese porter camp we had passed on the way up, then the right side would win. In the end I did get there to find that the porters had been burning bamboo cut to improve the fields of fire of their defences.

I started the trip wearing a pair of frontier chaplies, which quickly came apart. Had I not also been wearing a pair of ankle puttees to bind the chaplies to my feet, the adventure could have ended differently. Compared to today's soldiers, we were very seriously under-trained for what we had to do. Learning was ad hoc and often both painful and expensive.

The weeks spent at Colaba in preparation for the sea-borne assault on Ramree Island were, for me, the most enjoyable of the whole Burma campaign. We were camped comfortably near the beach, a local estuary provided a plentiful supply of fish for the expenditure of a few cigarette tins of gelignite and, under Maj Holmwood the company morale and esprit-de-corps had reached a high level. The operation which followed was also very interesting and different from anything we had done before. Company headquarters and the platoons were embarked on a B1 passenger ship of about 80(K) tonnes - I believe it was the *Rajula* which went on to become the oldest steam-driven vessel operating under the Red Ensign.

Early on the morning of 'D' Day the ships anchored off Kyaukpyo on the north end of Ramree Island. We looked out on to a sandy beach backed by scattered houses and numerous palm and mango trees. Inland and to the south, the anchorage was dominated by a long, jungle-covered ridge, the seaward end

of which formed the south-western headland of the bay in which we had anchored. The ridge was quite steep and probably about 400ft high. It was the obvious place from which to direct fire at the anchorage. The *Rajula* lay quite close in, a few hundred yards from the beach. A mile or more further out our principal escort vessel, the battleship "Warspite" took station. As we waited to go ashore *Warspite* opened fire on the ridge with her 15in guns, firing over the *Rajula* and lesser vessels. Each time she fired a salvo our ship seemed to jump several inches and the noise of the guns and the shells slamming into the ridge was truly awe-inspiring. Each shell stripped the ridge of its jungle cover over an area 20 to 30 yards across. Better to give than to receive such gifts.

Kyaukpyo beach was heavily mined, using an anti-boat mine we had not seen before. These were steel hemispheres, a little larger than half a football, equipped with three protruding horns. Contact with a horn crushed it and fired the mine. Waterproof, these mines would have been deadly if properly used. Fortunately they were not. All those we found or heard of had been laid in soft sand above high water mark and were harmless to the landing craft. Behind the beaches, on the roads and tracks and in some buildings, were booby traps a'plenty. These mostly consisted of a small aircraft bomb, buried tail-down with the nose fuse removed and a British 36 grenade substituted. A trip wire attached to the pin of the grenade armed the device. It seemed clear to me that these devices had been carefully planted by Japanese sappers and the local infantry left, before clearing the area, to unroll the trip wires, and so arm the bombs. And as was the way of infantry, they wanted nothing to do with explosive sapper business. Consequently, all those booby-trapped bombs we located, still had their wires neatly rolled awaiting setting. In the event Japanese resistance on Ramree was not a serious obstacle and the whole island was soon secured. We were then required to turn a dusty north/south track running the length of the island into a passable road to support troops concentrated at the southern end. This was easier said than done. As in the Arakan, there was little or no stone on the island - we failed to find anything usable - and no time to burn bricks. Eventually the PM platoon tried using a hard blue clay, of which we found a good supply, and surfacing it with gravel dug from the beds of the many streams draining the island which is quite hilly. This worked well, and with every available local coolie employed on the job, more than 20 miles of good road was completed. I am just very glad, that we were pulled off Ramree before the monsoon. We heard later that the first of the season's rains turned our smooth, well cambered road into a greasy blue skidpan. The PM platoon attracted quite a lot of favourable comment for its original initiative, but it is doubtful whether their reputation would have survived the eventual mess.

When 26 Div were ordered to undertake the Ramree combined-op they had been in the Arakan in an operational role for about 2 years and had seen some hard fighting. Maj Gen Lomax, then in command and widely liked and respected in the Division, told us that the Ramree operation was to be a last and final effort, after which the Division would have the rest it deserved. It was not to be. Fearful that the drive from the north, spearheaded by 19 Div of 14th Army,

would not reach Rangoon before the monsoon, SEAC decided on another combined-op, this time to take Rangoon from the sea, and ordered 26 Div to carry it out. Divisional gossip (part iv orders), widely believed at the time, had it that General Lomax protested vehemently that he had given the men his word that they would get a break after Ramree, and for his pains was removed from the command. Whatever the reason, Lomax left and his replacement, quickly made himself unpopular. Lomax had an amphibious jeep, the only one in the Division, which was his pride and joy. It was called 'Snowflake'. Where, demanded the new GOC, was Snowflake? He was said to have become quite cross about the absence of his status symbol. What he did not know while he raged, was that Snowflake was being dismantled in the bushes not far from his tent in preparation for shipment to India, restoration by rear echelons, and presentation to Lomax with the Division's compliments.

During our time in the Arakan/Ramree theatre the Division received visits from Lord Louis Mountbatten. On the first occasion units were told that 20% of their personnel were to attend the parade. Naturally each unit picked its smartest looking men. We were told that at the end of the parade the CinC would speak to the men informally. For days we practised an orderly but informal surge to get into position around his jeep. Lord Louis addressed the men in slow but faultless Urdu and the impression he created was excellent.

The same conditions - 20% of personnel - applied when he returned a year later. Once more we practised the orderly rush to surround his jeep - easier this time since the same 20% were often chosen. 24 hours before the parade Div HQ rushed a confidential order to all units. No Indian personnel under the rank of jemadar who had attended the first parade was to be allowed to attend on the morrow because the speech was word for word the same. This time the informal surge looked much more natural. I can still remember the opening words of Lord Louis' address "main bahut kush hum ap logen ko milna hai".

The Ramree operation was mostly a walk-over. Rangoon, we were confidentially informed would not be so easy. The plan called for dropping a Gurgka airborne battalion on Elephant Point, at the south-west mouth of the Irawaddy River on which Rangoon is situated. The remainder of the assault forces were to embark in landing craft, either at Ramree or by descending via scrambling nets. The first principal task of 98 Company was to make sure that transport and support vehicles, including artillery and tanks, could land safely on the west bank. This was an area of considerable uncertainty. The river below Rangoon is tidal, with a large rise and fall. At low tide wide mud banks are revealed on the west bank and Div HQ planners were unable to locate anyone who could say if the banks could support a vehicle. Debate was prolonged and indecisive until it was noticed that aerial reconnaissance photographs showed cattle walking on the bank. Word went out - to the sappers of course - find out what pressure the average Burmese cow's hoof puts on the ground. Reassuringly if a cow could stand, so it seemed could a truck.

The invasion date had to be in very early May to get there before the monsoon. High tide times would have meant that the landing took place at night, or in full daylight from embarkation ex the troopships to the landing point some 25 miles away. Much of that up a river defended by anti-aircraft guns designed to discourage mine-laying by the RAF. We were embarked into LCAs in the small hours of 2 May in quite rough sea conditions, so that descent via scrambling nets was difficult and hazardous. We carried about 90lbs per man using improvised bergens made up from bamboo and khaki webbing. There were no casualties during embarkation thanks to the excellent handling of the LCAs in very difficult conditions. Almost all the jawans, about 30 in each landing craft, were seasick and it was a real relief that we set out for the river mouth.

The operation did not forestall the monsoon, which broke early that year. It rained heavily during the approach and as we ran up the wide river, cloud cover was complete, black and threatening at a few hundred feet. We had been told that enormous air support would be available but not a single plane was to be seen. The cloud cover was impenetrable, so it was as well that once again 26 Div was lucky. The Japanese had pulled out a few days before we landed. The Gurkhas found a few Japs still at Elephant Point, whom they quickly overran. The rest of us, soaked, smothered in mud and generally unimpressed with monsoon Burma, made an unopposed landfall. As to the debate, we soon discovered that the banks would indeed support a truck - provided you didn't try to drive it. The moment the wheels began turning they sank up to the axle and the truck stayed put until a bulldozer pulled it out. Fortunately the plan called for the laying of steelmesh tracking at the landing points and most vehicles were brought ashore before the flooding tide covered the area.

My most vivid memory of the actual landing is of Jem Abdul Aziz going ashore followed by his orderly. The latter was bowed down, as were we all, by his 90lb load. In his left hand was his rifle, in his right Jem Sahib's hookah.

Within 48 hours of landing we were uplifted by LCAs and taken to Rangoon, a sorry sight with shiploads of rotting rice floating around the docks. The city was almost empty, save for convoys of bullock carts laden with loot as locals helped themselves to whatever the Japanese had left. The HQ and some of the men of 98 Company were billeted initially in the house of a former principal officer of the Imperial Bank. Of its former sumptuous furnishings little remained but a dining table. Large enough for a battalion officers' mess and far too heavy to remove by bullock cart, it survived to remind us of past splendours. The house itself was in good condition and, after two years in tents and bashas, extremely comfortable.

While the Brigade waited to embark for Rangoon, Brig 'Daddy' Thomas, who had commanded us from the beginning, was replaced by Brig Timaiya, who went on to be GOC in C of the army of independent India. Brig Timaiya had an elder brother, also a regular soldier, who had been captured by the Japs

and had joined the INA. Many and fierce, reported friends at Brigade HQ, were the threats uttered against the traitor brother. Eventually it fell to my lot to arrest him in Rangoon. I encountered Maj Timaiyu driving a car, on which I had my requisitioning eye, resplendent in breeches and polished field boots, ironed shirt and peaked cap. It was difficult to believe that even Div HQ could produce such military chic at a time when most of us were still muddy and bedraggled. When respectfully challenged - I was still only a lieutenant - he announced himself as 'Quartermaster General of the Indian National Army' and was duly escorted to Changi jail at the business end of my sten gun.

Two years later, on 15 August 1947, at the Independence Day parade in Mercara, capital of Coorg, the Timaiyu's home state, I found myself standing next to him and when a fellow planter introduced us later, was able to say 'haven't we met somewhere before?' He was rather a pleasant chap when you got to know him. The PM Platoon was shortly detached to Mingladon airport charged with repairing the runways. There were two of these, both cratered and trenched across by the retreating Japanese. The airport was already in heavy use by the RAF, some craters having been roughly filled so that aircraft could just about land and take off. We were supposed to do a proper job. Day after day went by and time and again the RAF commander declined to close the runways or changed his mind at the last moment. Finally we got him to order a 48 hour closure from dawn two days ahead. There was no night flying, so I had the platoon out by 2 am and we dug out every crater a foot or so deep to assist the RAF's mind to stay made up. All went well until mid-morning, when a RAF staff officer in a jeep announced that a squadron of Spitfires was approaching with insufficient fuel for any available diversion and would be landing in a few minutes and what were we going to do about it. There wasn't much we could do. However on the edge of one of the two runways an area of about 600yds x 15yds, was unobstructed and we hastily put out marking tapes to define it. And then the planes were overhead. They made a quick circuit and, one by one, side-slipping off height on the final approach, they made their descents. I have never seen a more dramatic display of flying skills, and all landed safely save one who ran into a soft patch and bent his propellor. It was brilliant flying. Yet within a week one of the same eight pilots had taxied his plane into an open crater, with all the room in the world to go round it, and two more had written off their Spitfires by landing on the wrong runway which we had not yet repaired.

The junction of 14th Army driving south and 26 Div of 15 Corps from the sea cut off a large number of Japanese troops in south western Burma. There were some brisk and bloody encounters and bodies of Japanese troops tried to break through the encirclement, but 98 Field Company was not involved.

From Rangoon the division was withdrawn to South India and into quarters 25 miles out of Bangalore in Mysore. There we went into training for operation Zipper, the projected sea-borne invasion of Malaysia, but the war ended with the dropping of the second atom bomb before preparations were complete.

Lt John Moss of 98 Field Company

During the research through war diaries and the collection of individual memoirs of Arakan the impression arose that, when on a detached mission, Lt Moss had been lost; it was clear that he had not returned to 98 Company.

I can assure you that John Moss was not killed in Arakan in March 1944, but is still alive. I can however offer the following possible explanation. In January 1944 I was sent off up the Sangu River with Hav Alif Din and about a dozen PMs of No 1 Platoon of 98 Company. My instructions were to open the river to light boats from the watershed separating the Sangu from the Kaladan down to the coast. I assumed that the purpose was to enable any casualties from an advance down the Kaladan to be evacuated. Be that as it may, I embarked near Bandaban with a month's rations and half a ton of explosives in four dug-out canoes with Mrung drivers. There was a standing Gurkha patrol two or three days further on and I was told that there might (or might not) be Gurkhas on the watershed or alternatively, there might (or might not) be Japanese there instead. In the event we encountered neither.

The Sangu River flows through densely forested hills down massive gorges. These must have been quite impassable during the monsoon. During the dry weather the water level was low and deep calm sections of water in the gorges were separated by shallow, fast running sections which might be called rapids. We happily blew our way up these. As a bonus, each charge blew up fish too. So we lived well and managed to swap mahseer for tea, condensed milk and sugar with the Gurkha standing patrol. After each day we aimed to pull ashore on a shingle bank to cook evening khana before retiring into the jungle for the night. Where the gorges were particularly sheer I was able to catch in my mess-tin the truly aerated water from a waterfall. After chlorinated water, this made my peg of Canadian Club truly delectable. After the best part of a month, the Gurkhas forwarded an envelope containing a captain's shoulder tabs (I having been appointed acting 2IC in absentia) and instructions to return.

When I got back events were in some confusion and the company pretty scattered. Awaiting me were orders to return to Kirkee from whence I was immediately posted to 26 Field Company, part of a jungle training organisation near Hardwar. So I never got integrated again into 98 Company, and doubtless for most of my colleagues and indeed for most of No 1 Platoon I had simply disappeared; and at that time everyone had better things to do than to worry about missing subalterns. The gossip doubtless was that I had gone out blowing things up, and had become the victim of my own efforts.

I end this episode with a couple of additional remarks. The first is about my PM sappers. A point which is seldom mentioned, if at all - namely the exceptional sensitivity shown towards their British officer. As we moved upstream, we developed a drill in case we happened to meet a Japanese patrol. Our party comprised LHav Alif Din, Nk Said Mohamed and LNk Sikander Shah. Alif

Din was an Awan, a fine, tall and tough regular soldier. Said Mohamed had just returned from a tour of duty in Chitral; and Sikander Shah was a big, silent, intensely loyal Sayyid. They were each put in charge of one of our dug-outs, along with two or three sappers and a proportion of our stores. Every evening we came ashore and, while khana was being cooked, a position was prepared in the jungle in case of surprise by the enemy; and every evening, before twilight and before we went into the jungle, Alif Din would come with one of the other NCOs and two sappers - different ones each day, to talk with me for twenty minutes or so until dark. Then he would stand up and say "Now Sahib, darkness has come, we will pray and then go to our rest." What a morale-booster!

My other point is about the country itself. During the whole of our journey we never saw a person. High up on the mountain-sides we did sometimes see a small clearing in the jungle, where no doubt the people grew some hill-rice and bananas. And occasionally at the river-side we saw a small man-made heap of sand, decorated with flowers and leaves - but never a person. For company we had only black gibbons hanging down from the branches and screaming at us, before they swung back into the jungle.

The MO, the Milk and the Fish

Shortly after our return from the Goppe Pass, when the monsoon was at its height, we were working on the land opposite Cox's Bazaar. An MO from somewhere in India visited us. He examined the sappers, declared them to be under-nourished, and instructed that they should be given more milk. Our reply was to the point - let him give us the milk, and it would be drunk. His point was nevertheless valid, as our depleted numbers testified; so when I saw a local fisherman carrying an enormous flatfish which he had just caught, I bought it for a few rupees, thinking it would be a fine addition to the diet. As luck would have it, the self-appointed maulvi in the section declared that it was not halal. The fisherman and I demonstrated its gills; but, it being a flatfish, these were declared not to be in the right place, so it could not be halal. With much regret I gave the fish back to the fisherman, who hastened happily away with it and my rupees, and the section once again dined on its small ration of dried goat meat.

About the same time, the road on the island from the ferry to the hospital was getting along nicely. We were delighted to find some sawn timber and the section built an elegant trestle bridge with sawn timber abutments. Everybody went to bed very pleased. The night was one of those when ten inches of rain fell. In the morning there was a 100yds gap in the road where our bridge had been, and not even a piece of that lovely timber to be seen.

The Wilful OC

The War Diary of 98 Company records that in September 1943 difficulties were encountered with the piling, in maintaining the Karnaphuli and some

other bridges. The PM section was engaged strengthening bridges south of the Karnaphuli River to take heavy (including tracked) vehicles. The original bridges across the many steep-sided chaungs were made of steel trestles with steel cross-pieces), with road bearers carrying somewhat crummy tarmac on top. We strengthened them by driving wooden piles on either side and sometimes between the trestles, and adding a supporting transom across. There was little working room for a half-section to work the manual pile-driver, and location of the piles ready for driving was made difficult by the very great tides and the swift flow. It was found that the best way to locate a pile was to have two sappers in a prahau positioning the bottom of the pile with ropes, and then slowly lowering the weight of the driver on to its top, and easing it down through the thick mud.

The OC, come to inspect, declared progress to be too slow. He opined that the work could easily be speeded up. All that was necessary was to hoist a pile to the top of the driver, position the bottom of it, and then let it drop vertically under its own weight into its appointed place. The problem is that piles do not necessarily drop vertically. On the word "go", the sappers released the hoisting rope and the pile fell - but not vertically! The top half hit the edge of the trestle and the whole shot into the water straight between the two sappers in the prahau, and smack through the side of it, before disappearing into the mud. There was not a smile, nor any comment from the sappers. They simply and without instructions went forward to pull their colleagues out of the water and to salvage the prahau; but it was sunk and irreparable, and it took two days to find another.

Colonel SH Clark OBE DL of 483 Field Company

I joined 483 Field Company in June 1943, a few days before my 21st birthday. They were in the Troop Forming Battalion area at Dighi. The officers were:-

OC	Maj EM Hall
2IC	Capt FWW Wyatt
PM Platoon	Lt NO Kendall
Mahratta Platoon	Lt WJA Bradbury
Sikh Platoon	Lt SH Clark

The company entrained with ceremony at Poona on 21 June 1943, and took a good week to arrive at Ranchi where we remained under canvas on the dusty playing fields doing weapon training and battle drills. The bunds of the paddy teemed with snakes, cobras and kraits inhibiting our fieldcraft and minor tactics. In July 1943 we entrained for Feni on the Indian/Burmese border where there was a large airfield with Vultee Vengeance dive-bombers and Beaufighters. Our main tasks were to dig emplacements for 3.7in HAA guns, set the base frames in concrete, and build protective bunds around the emplacements.

Bricks were in very short supply, so we used them for corners of buildings, and filled in between with bamboo uprights and split bamboo laths; these were then plastered with cement mix on both sides. Our BOR Sgt Maj was a Class I Bricklayer who set out the buildings and supervised all the bricklayers in the

company to build the corners and keep us straight. Our accommodation, off the airfield base, was bamboo huts with chatai roofs, and was adequate; but as the water table was seldom more than one foot below the surface, there were problems with drainage. Once I was being driven in my section vehicle through the crowded Feni bazaar. We hit a cart and the bullock fell to the ground as if dead. A great crowd gathered and started to make a fuss. My driver got out, looked and then blew suddenly and hard into the bullock's ear. It immediately recovered and got up. It had only been stunned by the pole of the cart.

In September 1943 we moved to Chittagong and prepared our section stores for manpack transport, mostly using old ghee tins - 40lbs per pack. Our task was to open a jeep track from river base Rangamati to Lungleh; this was the track to Fort White, held by a garrison which was resupplied by air, in the Lushai Hills. We embarked to move up the Karnaphuli River by steamer. Each section was given some six miles of track.

We had to carve a one-way fair weather track out of the jungle. This involved major jungle clearance and bridging many gaps, usually about 30ft wide and 30ft deep, using jungle timber. We had brought a plentiful supply of dogs and spikes, and relied on porters to bring us more. Rations and weekly supplies would come by chartered 100 maund (80lb) dugout boats by river. Messages were sent to Company HQ by the porters as radio did not work in those conditions.

We completed these tasks in about six weeks and returned to Chittagong to pick up our vehicles; and we then set off down the long and tortuous road to Bawli Bazaar. Much of the road was surfaced with corduroy and was continuously maintained by coolies flinging earth on the road. At that time of year it meant that we moved over a griddle of tree trunks, in a dense cloud of dust.

The first hurdle we had to surmount was the crossing of the Karnaphuli River by the rail bridge. The gap between the rails and sleepers had been filled with decking and was single track. The bridge was about 50ft above the river and about a mile long. Chatai screens had been placed on each side. Every now and then there were gaps in the screens which we assumed had been caused by vehicles going over the edge. Many of our drivers were inexperienced, but we managed to crawl across without incident.

We arrived at Bawli Bazaar in December and spent Christmas there. We had time to visit a prisoner of war camp, as we had never seen a Japanese before, only to be shaken to find that they were big burly men, almost white, who appeared a very formidable enemy; all most unlike what we had imagined them to be. We later discovered that these men were from an elite unit recruited from an island in North Japan. (A 28 Field Company officer recalls a Divisional Intelligence Summary describing opponents as "tall fishermen from Hokkaido", which is the northernmost island of Japan.)

The company moved to Maungdaw in January 1944 and was employed on track improvement, mending jetties and building a bridge between two islands. We then moved to hold part of the front line, just in front of a battery of 5.5in guns. By day we carried out route maintenance of the road to the foot of the Ngakyedauk Pass. The Japanese offensive, which culminated in a major attack on 7 Div and the battle of the Administrative Box, had just begun, and the pass had been cut between 7 Div and 5 Div. By night we carried out patrols and set up ambushes with the infantry.

The Japanese had captured a feature of several "pimples" around the tunnels on the Maungdaw to Buthidaung road. Every day Vengeance dive-bombers attacked the features until they had removed all the vegetation. The enemy had also built a strong set of bunkers on Point 551, which dominated the area East of the tunnels. Finally the infantry assaulted the tunnels and took them after fierce fighting. They then set about clearing Point 551, preparatory to opening the road towards Buthidaung. This they did by manhandling a 5.5inch gun on to the tunnels, sighting down the gun barrel and firing at point-blank range. This resulted in complete destruction of the bunkers.

By February 1944 we were employed upgrading the main route to Class 24 from Bawli Bazaar to Ngakyedauk. We had the satisfaction of seeing 36 (British) Div crossing over our bridges with all their heavy vehicles, as they arrived in the area. The company had moved to the foot of the Ngakyedauk Pass, where they had a sharp engagement one night when the Japanese got inside their wire. There was a fire fight in which the company quartermaster havaldar was killed by the OC's orderly, because he did not hear his challenge in the racket that was going on. The same night a squadron sergeant major in the adjacent cavalry unit was going his rounds, trying to control the fire fight, when he saw a movement in his slit trench; he went to investigate it, and had his head chopped off by a Japanese officer. The jungle around the company was distinctly unsafe, as enemy patrols were very active at night.

The company then moved back in April to take on the task of linking the main supply route to Goppe Bazaar, by developing a track over the Mayu hills; this was to avoid using the main route which was blocked at the Ngakyedauk Pass and beyond. 24 Engineer Battalion, commanded by Lt Col Bishop, prepared the approach route over paddy fields, up to the foot of the hills. 483 Company's task was to build bridges over the small nullahs, to cut down the thickest jungle up the hillside, and to develop a track for 30cwt vehicles.

The bridges were made by cutting jungle timbers 40ft long and driving them into the ground up to 30ft. Timbers were up to 12ins in diameter, and the pile driver was a "monkey" which had two rings on the top, and a hole in the middle, weighing about 200lbs. A gantry the width of the roadway was built, so that four piles could be driven to form a bent by cutting off the ragged tops, and spiking on a level capsill ready to take the roadbearers and decking.

To speed up the piling we drilled a hole in the top of the pile and inserted an iron rod, the monkey would then fall square on the pile by sliding down the rod. Two ropes were tied to the rings through a double block, and five tails were added to each. With much chanting and good team work we could achieve about ten blows a minute. Driving continued until we achieved a set of less than a tenth of an inch. The nature of the ground and the water level sometimes meant that we did not get the tenth of an inch set, and we found that if we had driven a pile 30ft into the ground and left it over night, it would have achieved a complete set by the morning. This was due to the suction which developed when the soil was not vibrated.

When we reached the top of the pass the company moved to the other side of the Mayu Range, and worked up to the top from the eastern side.

By May 1944 the task was completed and the company moved back to Rumkhalong, where the only excitement was that we sited the guard tent over a nest of kraits. In the middle of the night the guard went berserk, killing the snakes with rifle butts and bayonets. In July I left the company to return to Kirkee as Adjutant, 2 Training Battalion.

Colonel WCS Harrison CBE, 403 Field Park Company

I had the great good fortune to serve with char sau tin company from its formation until its disbandment. Maj Bill Carter formed the Squadron, as it then was, at Dighi, with Capt Ken Lambert as his 2IC and with four subalterns – Flemming Pottger (a Dane who had escaped from Singapore where he had been working with the East Asiatic Company) who was Workshop officer, Chris Henson (who was killed tragically after posting to another unit), another chap whose name escapes me and who looked after MT, and myself, in charge of the mine laying and lifting troop. We went off to Secunderabad to join 43 Armd Div which was intended for the desert.

While there we began to sort out the sub-units and to get down to serious military and sapper training. During this period I was sent to Lahore to do a Plant Operating course which proved invaluable before very long. I took with me Nk Abdul Ghafur and he took to the training marvellously well - never having seen anything remotely like a bulldozer before. He was virtually responsible for the training of all the extra plant operators we needed in the company and became a most valuable asset when our plant (two D6s and three D4s) eventually materialised.

When I rejoined the unit (now a Field Company) it had moved to Ranchi to join 15 Corps Troops. At Ranchi we set to and reformed the sub-units and began to train them for their revised tasks. Our next move was to Ramu where we began our real task. My vivid memory is of meeting, on the march down from the railhead to our unit camp, half a dozen "local yokels" with a huge python

draped over their shoulders - it must have been ten or twelve feet long and as thick as a man's leg. This was the only snake of those dimensions I saw.

Our main field task was road and bridge building, assisted by locally recruited labour. The workshop section had to approach the formidable task of providing lighting for Corps HQ which, with a Divisional HQ lighting set, was virtually impossible. Not only was the basic lighting commitment far too much for the generator, but so many put up unauthorised extensions that light bulbs at the ends of the system barely glowed. All this called for extemporisation plus plus, and a reign of terror by the Camp Commandant.

Very shortly we moved forward to a new camp site near Bawli and I was despatched to Calcutta to collect our earth moving plant. We had been building part of the Arakan road with the inevitable timber bridges and on my return journey I had some difficulty in persuading the MPs to allow me to take the dozers over the bridges. Prompted by Bill Carter, the CRE Corps Troops, Lt Col Pichard Connor, a Bengal Sapper, quickly extended his protecting arm.

Almost immediately after my return to 403, Capt Ken Lambert was given his own company in one of the divisions and I became 2IC. Lt Peg Jermyn took over the Field Section and quickly learned all the funny little ways of bulldozers. With the invaluable assistance of my Naik our small band of earth movers tackled a whole range of useful and widely dispersed tasks - we might get an urgent order to provide a landing strip for the Corps Comd's Auster, or perhaps be sent to support one of the Field Companies. The OC Malerkotla Field Company, Richard Orgill, habitually referred to our dozers as "Burra Monster or Chota Monster".

At this time my BD training caught up with me. I was summoned to Corps HQ to deal with two large bombs which had landed but not exploded almost adjacent to the Corps Commander's tent. Enquiries elicited that an IAF Officer had taken off from the the adjacent airfield with a bomb under each wing, and, fearing that he would not clear the trees, he let them both go, but without arming them. It was agreed that as the gallant bird-men had put the bombs there, they really should recover them.

By now the lighting for Corps HQ had become a very real worry, not least because there had been an appreciable increase in numbers and so in the bids for lighting. Capt Pop Eddols, the Q man in CRE's HQ together with our own QMS were in touch with various mysterious sources in Cox's Bazaar and in exchange for several loads of sawn timber they managed to acquire from the civilian lighting outfit an excellent and large single cylinder diesel generator. This was water cooled and it was vital to keep the large storage tank which we had rigged full of water. When we moved forward, we handed this apparatus to a West African sapper unit, who wrecked it comprehensively by forgetting to keep up the supply of cooling water.

The Corps Commander, Gen Christison, demanded a mobile HQ mess made of bamboo panels as a sort of super basha. This was to be carried on 3 tonners. "If I am not comfortable I cannot think, and when I can't think, you chaps are in real trouble". I designed the building and Flemming's men built it. By then Gen Christison had moved on and his successor declined to have it, so we converted it to an operating theatre for a forward surgical unit.

With the recall of Bill Carter to Kirkee I assumed command until Maj John Rusted arrived to take us to Akyab, where we established a very large Engineer Stores Depot. This incorporated a sawmill to cope with the insatiable demand for sawn timber. The circular saw blades became virtually impossible to obtain through normal channels, so I was sent to Calcutta with an incredible amount of money to seek supplies in the bazaar. This proved simple but hideously expensive. Other tasks included the mass production of "thunder boxes" and the restoration of a rice mill, whose output of local brown rice in plenty was ignored in favour of imported white rice despite the obviously expensive use of air resources.

403 Company were involved in the construction and subsequent operation of the Goppe aerial ropeway. Although the equipment was second-hand, it was not as ramshackle as has been suggested. A Ford V8 was kept in good working order and carried a very heavy and variable load.

In May or June 1945 the Company moved back to Coimbatore near Madras, when John Rusted left and I again assumed command. Our earth movers were in great demand and we provided a number of recreational facilities - even a swimming pool. At the end of 1945 we moved back to Kirkee to disband.

Major DS Young MC, 30 Field Company

In February 1944 when 30 Company left Khadakvasla I was in charge of 1 Sikh Section. We were all going on active service for the first time and we had to learn fast. Some things seemed pretty obvious, but were not. For instance, we had spent some days dyeing all our underclothes, hankies, etc, olive green for camouflage, but in the days after setting off for the Arakan many pieces of fancy coloured clothing appeared, undyed - and had to be confiscated! We had to take malaria far more seriously, always having a mosquito net and taking our daily tablet of mepacrin. Later these disciplines became almost automatic.

For the Tunnels operations, 1 Section was attached to 72 Brigade for any help needed. The Brigade consisted of three British battalions - the Royal Sussex, the Gloucesters and the South Wales Borderers. For them, as for us, it was the first time working with units of another race. At first the British were not sure how the Indians would stand up under fire and were they capable of engineering jobs? But mutual respect was soon established and things went well.

The building of the box girder bridge was the first experience of being under fire. In darkness every sound was enormously magnified and made us feel that every time we moved a girder the Japanese must be hearing it 250 yards away over the hill and would pick us off very easily. In fact none of the shells lobbed in our direction was near enough to cause even splinters to reach us.

During the two weeks or so that we were there we had only one casualty - my orderly, who jumped down from a truck with his sten gun not on the safety catch and the jar of landing set off the trigger which killed him instantly. It was both a personal loss and one for the unit too, though a timely reminder that sten guns were notoriously dangerous if kept without the safety catch on.

We learnt how valuable water was when every drop had to be carried up the hills to the posts established by the infantry and when we had to cut paths through the bamboo to reach the top in the first place. Bamboo is marvellous stuff for all sorts of uses, not least temporary accommodation, but it blunts anything used for cutting it extremely fast, unless it is very green. We learnt to safeguard our water bottles like gold.

The ability of the Japanese to stay in the bunkers whatever was thrown at them was quite amazing. Before the final assault on the hill above the West Tunnel attempts to consolidate the area near the tunnel were continually thwarted by a well placed bunker that could never be reached with a direct hit. It was decided to get them out with flame throwers. We got hold of a couple of these and climbed up below the bunker before setting them off. The result was that the whole hillside was burned and as far as we could judge the bunker completely covered with flames and smoke. An attack on the bunker after using the flame thrower, again brought accurate fire on to those attacking. In fact the Japanese only withdrew after the Tunnel was taken and they were the last bunker left.

Captain WW Guthrie MC 93 Field Company

We arrived in the Maungdaw area in late March 1944. Contact with the enemy was taking place mainly high up on the west side of the Mayu Range inland from Maungdaw and slightly south of the tunnel road to Buthedaung. The tunnel was a hot topic. What was in it? What was on the other side? Besides manning our perimeter, which was open to a wide stretch of coastal flat land, we improved the single access road to the tunnel area (actually an old railroad bed), dug for water and set up water points. On one occasion a dig halted abruptly on the skull of a buried Jap soldier. Most importantly we cleared trails from the tunnel area up to the infantry positions, which were dependent on mule trains for supplies. There were fire-fights up there, and casualties; but our artillery seemed to be well zeroed in, firing from the brigade area, just behind our lines.

Hereabouts Lt Young, from 5 Div Engineers, made the first check-out of the tunnel. To shorten the run from the north to the tunnel area, it was decided to improve a track that skirted the foothills, but this entailed crossing the dry bed of a stream that came down from the range. The banks were about 15ft high and some 100ft apart and we bridged it with wood trestles and steel I-beams. We did not have a heavy pile-driving capability, and I had doubts about the stability of the south abutment, especially in peak flows. For the pre-monsoon period, at least, it was a success.

At other times we played infantry, making shallow reconnaissances to the south. I am not sure now whether it was pre- or post-monsoon in Maungdaw when Maj Johnson scouted into enemy territory, along with our brigade intelligence officer. The latter had a reputation for ambling south, wearing local garb, usually on one-day excursions. I went with him one time. As planned, we withdrew as soon as we saw Japanese soldiers, about a quarter of a mile away across the paddy, manning what seemed to be a look-out bunker. Dick Johnson's outing, however, lasted all day and all night. They apparently got close enough to see and hear an enemy group talking by firelight in an enclosure; brigade obviously was appreciative of the information they brought back.

As the rains began, there was a rush to construct bamboo bashas and we prepared sites for these. Local contractors, with scores of villagers, were adept at getting the work done. We monitored progress. After the monsoon there was more extensive patrolling in force and we accompanied the infantry on these sorties which, once, had tank support and, nearly always, an artillery spotter plane on call. On an expedition with the Oxford and Buckinghamshires, the Bren gun carrier we were riding in ran over a mine. We probed for and cleared other mines in the vicinity, but two carriers had to be abandoned and there were casualties. On the way back, I believe from the same action, we were subjected to mortar fire from the foothills. One round landed among Ray Pryce's Mahrattas, leaving one man with severe leg wounds. Another time an enemy bunker was taken by surprise in the dark and a wounded Japanese was carried on a stretcher to Brigade HQ, several miles back.

In December the main brigade advance to Foul Point was relatively uneventful, except for one night when our area took mortar fire. One round landed in the village behind us, and we heard the women wailing. With our doctor, we located an elderly man with his leg shattered; the doctor had to amputate on the spot before the ambulance took the man away.

Dick sent the company into the foothills for a day and night patrol at one stage, and at another time a Sikh surrendered to us one night. He seemingly had been a convert to the JIF movement. I had my first plane flight, in the spotter plane, looking for likely trails across the range. We took off and landed on the beach.

Later on, on Akyab Island, I was not assigned to the airfield repair work, but I am sure the crew of a USAF bomber were grateful for our efforts there. The aircraft had to make a rough emergency landing on the runway while returning from to Dacca from a raid down south, just a day or two after we occupied the island.

The most vivid recollection I have of that time is of accompanying a Naval party to survey an inlet to the east, just south of Akyab. We went several miles upstream in the dark, in a Navy launch. Then with my tommy gun at the alert, I sat in a canoe with two Special Service men; they paddled silently onward, stopping briefly to take soundings. They made evasive detours of challenging sounds from the bank and eventually reached a spot on the south bank which, I was told, was a likely place to land a cut-off force. It was my role to wade ashore, see what I could, and return to the canoe. The tide had turned by this time and I found myself in thick mud up to my waist, fifty yards from the top of the bank. It was very slow-going, and the Navy men soon whispered me back - the tide was running out fast. As we drifted back the two miles or so to our shadowy "mother ship" and got close, we were fortunate that there were some quiet exclamations. "I was about to blow you out of the water!" said the Navy OIC. At this point a rickety enemy plane (it had to be) flew over us, going east with sparks flying from its exhausts. The Navy was ready to blast that too.

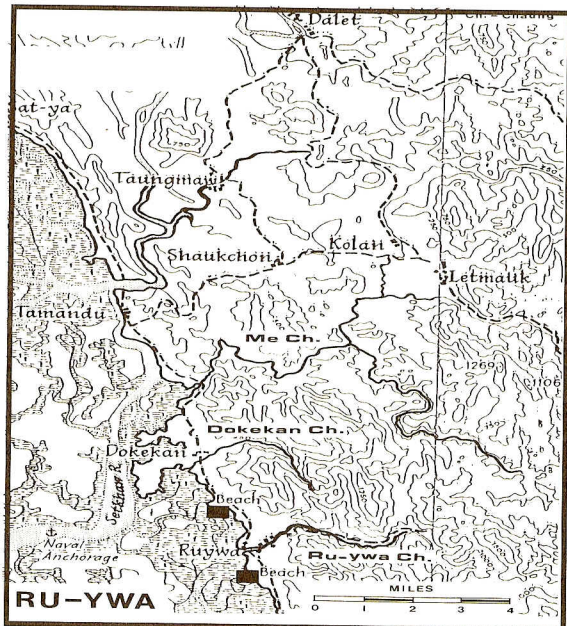
My memory is not too clear on Myebon. I remember going ashore from landing craft, and at various times in the next two or three weeks levelling some rice paddy to make a landing strip for light planes, and destroying a large stash of artillery shells found on top of a hill north of our area. Nearby on that same hill I located a large hamper of first aid and medical items, and a store of books. Obviously the enemy had moved in a hurry. We had close air to ground fire power by this time.

Much about Ru-ywa is fading also. I think we spent much of the first morning (or of the day before) some distance out, getting a battery of medium artillery in place, off-loading the guns from LCMs and constructing mesh and corduroy ramps to get them up the soft slopes from the water. They were ready for action on time. Later, at the main landing area, we were shelled while off-loading equipment and supplies, but kept working between rounds until told by the division's CRE, an observer, to move clear. We returned after dark. Our company area was shelled a few nights later and we were again under fire while digging for water in a stream bed further up the road.

When we came to the Me Chaung, Hav Amar Singh and I accompanied the first Baluch patrol probing northwards towards it. Just before dawn the point men detected enemy presence ahead. At daybreak we emerged by the road that ran to the chaung crossing, further to our right. In front was an area, clear all the way to the chaung, about a hundred yards away and about 50yds wide. The Baluch officer took his squad down the left side of the clearing. Amar Singh

and I stayed to their right. A light wooden jetty came into view directly in front of the patrol, and they made a bee-line directly for it. Reaching the bank, I heard a distinct metallic sound on the other side, and almost immediately the Baluch party was being hit. Amar Singh and I flattened out behind a low paddy bund. I could see some shadowy figures behind some bushes opposite, and emptied two TSMG magazines in their direction and Amar Singh shot in the same direction. By then a Sherman tank had come into view behind us, and it opened up with its Browning. (It is somewhat amusing that I wore my RE dress cap that morning and, not knowing if the crew had identified the target, I waved it above my head in the direction of the enemy emplacement). With adequate covering fire we made a staged withdrawal - the Baluch, Amar Singh and myself. Back by the tank someone, who had observed from higher ground, said he had seen Japanese running away from the chaung. A small party of Baluch was chosen to go back to investigate the damage, and I went with them - to boost morale, as I thought. We brought back the lieutenant and one other. [The award I received, much later, should not be tied specifically to that action].

Shortly afterwards Capt Buckley, who had come forward with the tank group, decided it was important that we look at the old bridge site, about two hundred yards further up. He led the way through the mangrove, below the road, and though there was still small arms fire around, we got close enough to size up the crossing. Not long afterwards his idea of getting the Gurkhas across on a light suspension bridge, improvised from enemy wire rope and local tree branches, was a reality, and valuable time had been gained in our move forward.



CHAPTER EIGHTEEN DEFENCE OF IMPHAL

MARCH TO AUGUST 1944

5 Indian Division

20 Indian Division

23 Indian Division

50 Indian Para Brigade

465 Army Troops Engrs

4 Corps Troops

HQ Engineers

20 (RB) Field Company

HQ Engineers

92 (RB) Field Company

481 (RB) Field Companies

91 (RB) Field Company

411 (RB) Parachute Squadron

24 (RB) Field Company

401(RB) Field Squadron,

402 (RB) Field Company,

305 (RB) Field Park Company,

9 (RB) Bridging Platoon and

(RB) Field Broadcasting Units

Compiled by Lieutenant Colonel MJJ Rolt

The main background for this chapter has been drawn from Field Marshall Slim's *Defeat into Victory* and Lt-Col EWC Sandes' *The Indian Engineers 1939-47* already acknowledged in the introduction to Part IV. Dates, names and some details stem from the RB units war diaries and from the memoirs of Majs WF Faulds, AN Fradgley MBE and RCH Greet, Capt DF Bennett and the compiler.

General Situation

Imphal is the capital of the Indian State of Manipur which forms a buffer between India and Burma. At its borders the Japanese pursuit ended in 1942 after they had driven the British-Indian forces out of Burma. The heart of the state is a plain about 25 miles east to west by 45 miles north to south, formed by the partial silting up of a lake. Indeed the southern part of the plain regularly floods during the monsoon. At an elevation of 2500ft, well watered and extremely fertile the land provides a very comfortable living for its inhabitants. Rice is easily cultivated and fish are plentiful. Over the years its rulers had been able to maintain their independence because of the mountain barriers which shelter it on all sides. A more comprehensive description of the geography and the communications is given in Chapter 15 (see Manipur State panorama).

General Bill Slim describes the situation at the opening of 1944 as follows: "In accordance with current overall plan for the theatre, he (Lt Gen Scoones) had been given the task of preparing for an advance into Burma. His 4 Corps,

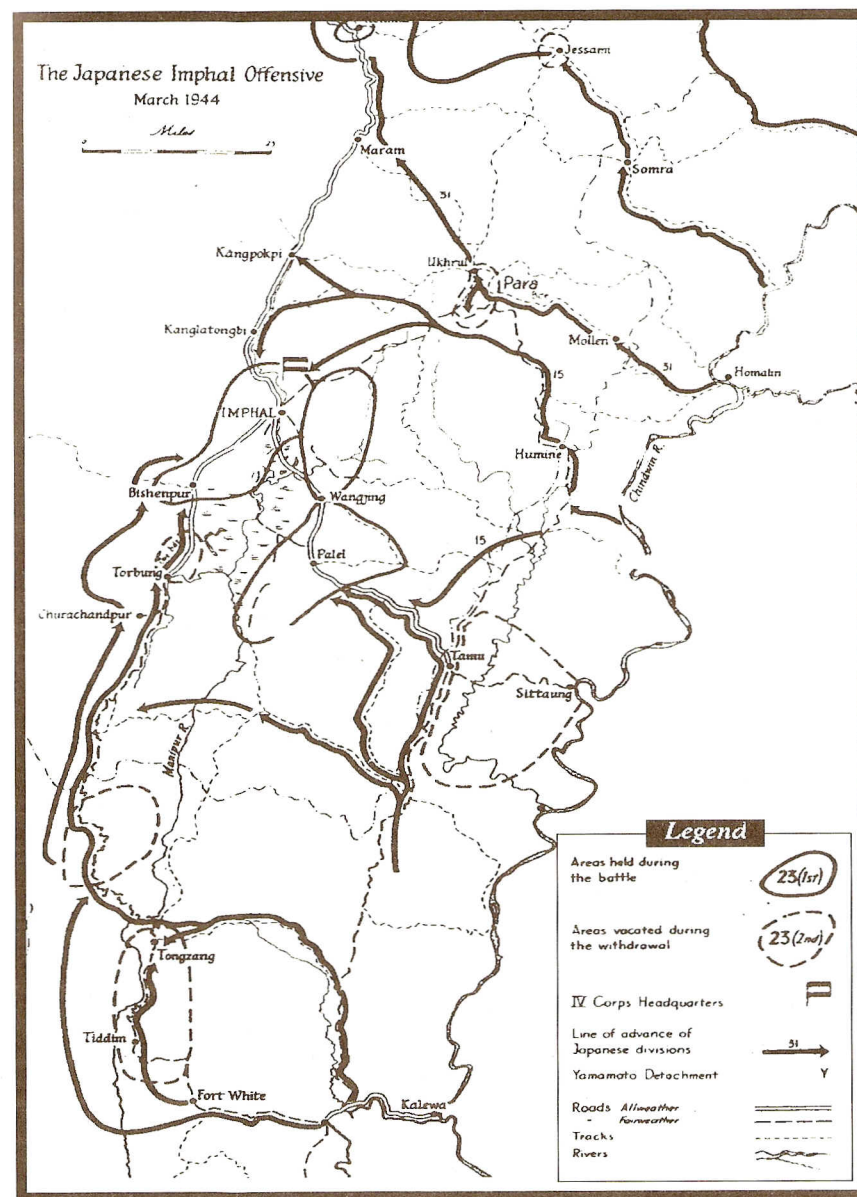
of three Indian divisions, had for several months been gradually pushing forward to dominate the wide hill area from the Kabaw Valley, up which we had staggered in the 1942 retreat, to the Chin Hills, some one hundred and fifty miles south of Imphal. Under cover of this broad arc, roads were being built, supplies collected, and all preparations made for a limited offensive across the Chindwin River. The whole layout of 4 Corps area and the dispositions of its fighting formations were designed with the idea of our taking the offensive".

The only road connecting Manipur and India to central Burma leads south from Imphal across the plain to Palel, through the Shenam pass and into the Kabaw valley at Tamu then a further eighty miles south down the valley to reach the Chindwin at Kalewa. Only a cart track in 1942, this had been upgraded and by 1944 was in good condition and being extended down the Kabaw valley. It was therefore the obvious main axis for a British advance into Burma or, equally, for a Japanese attack on India. Preparations here were in the hands of 20 Indian Division (Maj Gen DD Gracey) whose leading brigade was based on Tamu, with patrols in contact with the Japanese both south and eastward through the hills towards the Chindwin. A large supply depot had been formed at Moreh, at the north-western approach to the Kabaw valley and about sixty miles from Imphal.

The mountainous eastern borders were covered by 23 Indian Division commanded by Maj Gen OL Roberts, a Bengal Sapper. 49 Brigade was based on Ukhrul some forty miles north-east of Imphal, 37 Brigade was held in the Imphal area as the corps commander's only reserve and 1 Brigade was engaged in a feint down to the Chindwin to distract attention from the Wingate fly-in. A road connected Imphal and Ukhrul, the northern half no better than "jeepable in dry season". Elsewhere bridle tracks wound through the hills and down to the Chindwin.

To introduce an element of surprise into the planned advance into Burmah, 17 Ind Div (Maj Gen DT Cowan) had been given the task of opening an alternative route south from the Manipur plain to Tiddim then eastward to Kalewa on the Chindwin. For this task the division was raised as a Light Division, having only two infantry brigades and limited motor transport. It was intended the the division should move on foot supported by mule transport. The existing road ended at Churachandpur, forty miles from Imphal, which left a further one hundred and forty miles of new road to be built. At one stage, because of the shortage of other labour and plant, the fighting troops of the division turned their hands to road construction. So, by the end of 1943 17 Div was established at Tiddim and strongly contesting with the Japanese for possession of the Kennedy Peak-Fort White ridge some eight miles to the east.

Communications between Manipur and India were little better than those from Manipur to Burma just described. A single road leads from the railhead at Dimapur in Assam up to Kohima in the Naga Hills, 5500 feet above sea level,



and then southward to the Imphal plain at 2500ft, a distance of 134 miles and almost entirely side-hill cut. By the beginning of 1944 this road had been tarmacked throughout its length, but its twisty nature imposed a severe strain on drivers.

To the west the state of Manipur is separated from Shillong in India by tangled ranges rising to six and seven thousand feet above sea level. The streams typically run 3500ft below the tops of the peaks and the valley sides slope at gradients of between 1 in 2 and 1 in 3. A jeep track had been constructed across this extremely difficult terrain from Silchar to Bishenpur 16 miles south of Imphal.

The Japanese Imphal Offensive Plan

On 3rd February 1944 the Japanese made their attack in the Arakan. They had some initial success which made it necessary for General Slim to bring forward two reserve divisions, 26 and 36. However his new doctrine of standing fast in defensive positions and relying on air supply when surrounded was successful. Three weeks later the attack had been defeated and the few Japanese survivors were in retreat there but it was at this point that they began their assault on the central front.

The Japanese 15th Army objective was to destroy allied forces in Manipur and prepare to defend the approaches to Kohima. Three divisions were employed on three separate lines of advance. 33 Div approached from Kalewa in the south to attack 17 Ind Div at Tiddim, detaching one regiment to advance on Tamu. 15 Div crossed the Chindwin in the area of Homalin with the objective of encircling Imphal and cutting the Kohima road to the north. 31 Div crossed the Chindwin still further north to take Kohima, block the road and defend the Japanese position in Manipur from an allied counter-attack from Assam.

Knowing of the impending Japanese attack on the central front, General Slim now decided to reinforce 4 Corps with 5 Indian Division. In an unprecedented operation, divisional headquarters, the divisional artillery, HQ Engrs, 20 (RB) and 74 (Bengal) Field Companies, 9 Brigade and 123 Brigade were air-lifted from the Arakan to Imphal. 161 Brigade was air-lifted to Dimapur and arrived just in time to reinforce the hard-pressed garrison of Kohima.

The Tamu Road

100 Indian Infantry Brigade of 20 Ind Div had successfully advanced down the Kabaw valley as far as Htinzin 40 miles south of Tamu and had patrolled eastward to the Chindwin. Towards the end of February there was increased Japanese activity on the Chindwin, and the brigade was ordered to withdraw to defensive positions in the Tamu area. During March the brigade came under attack from units of the 33rd Japanese Division, including tanks and medium artillery and 481 (RB) Field Company (Maj MI Pritchard) of 20 Div Engineers,

which had been engaged in road-building, was deployed in the infantry role, manning defensive positions and patrolling. The company also provided the infantry escort to the tanks in what proved to be the first tank engagement of the campaign. Four enemy tanks were knocked out and one captured. Lt Col ARS Lucas, CRE 20 Div moved his headquarters, an RB unit, back from Moreh to Shenam on 19th March.

The main thrust of 15 Japanese Div was from east to west on the line Homalin-Ukhrul-Imphal but one regiment now turned South from Mintha to join 33 Div in an attack on Tamu on 22nd March. Enemy patrols appeared in the Palel area and for a while the road was cut at Tegnoupal, making it necessary to shorten the line of supply. 20 Ind Div was accordingly ordered to evacuate the Moreh positions and cover Palel from the Sita-Tegnoupal-Shenam area.

As the Japanese advance began efforts were made to back-load stores which had been stock-piled at the Moreh base but too little time was available and movement was hampered by artillery fire. 92 (RB) Field Company (Maj JH Clark) had been relieved from occupying defensive positions on "Sole", a hill feature in the Kabaw valley, by 4/10 GR on 26th March and moved to 51 OFD to improve the perimeter wiring and back-load stores. Two days later destruction of the base was ordered and the company war diary gives details of the action taken:-

1. Bailey bridge not to be blown. Charges removed. (This is the high-level Bailey bridge carrying the Palel road over the Lokchao river.)
2. Water Point - guncotton charges on legs of tanks, diesel pumps immobilised.
3. Reserve water point - tarpaulin split and engine immobilised.
4. Hospital Hill water point drained and as above.
5. POL dump - 16 dumps connected by ring-main of Primacord with several turns round several barrels in each dump. Fired by 1 hour (120ft) of safety fuze to ensure that the enemy not alerted until all troops evacuated.
6. FSD smashed up by tanks. All ata, dhal, grain etc contaminated with oil and petrol.
7. OFD - petrol tins put on every dump of clothing; ammunition, stores of all kinds and connected up with primacord. Shells de-fuzed and gelignite on primacord inserted.

The diary notes briefly; "Demolition successful" but this was not achieved without great endeavour as the citation for LHav Sadhu Singh's Military Medal recounts:

"For marked gallantry in action. In the evacuation and destruction of Moreh, on the Assam - Burma frontier, on 1st April 1944 in the early morning between 0600 - 0800, Havildar Sadhu Singh was the NCO in charge of a small party responsible for destroying 12 large dumps of Ordnance Stores in the Ordnance Field Depot.

"Heavy shelling in the area was continuous and while the party was working two dumps were struck by shells, prematurely set on fire, and exploded. In

spite of this, and knowing the urgency of his task, Hav Badhu Singh continued to prepare, check and finally fire the remaining dumps with petrol and explosives; the vast demolition that resulted was successful."

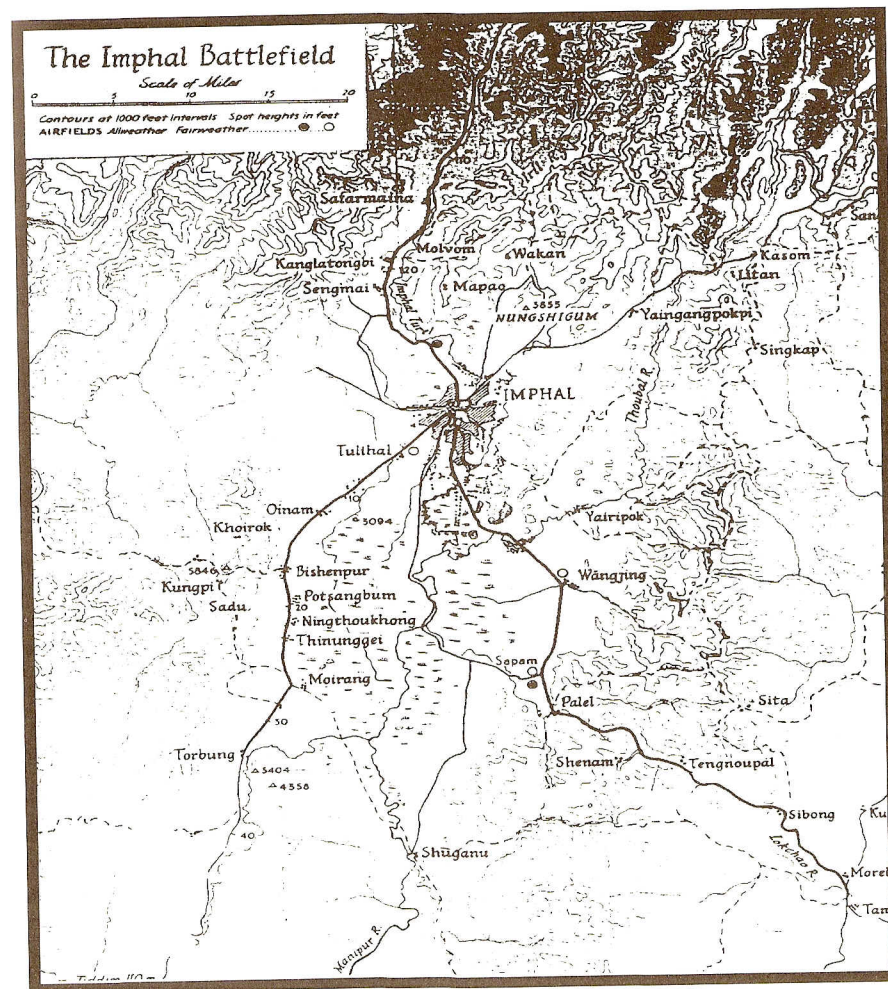
92 Company withdrew through Palel to Wangjing with 32 Brigade suffering casualties on the road from heavy shell-fire. Two weeks later it accompanied the brigade to the Bishenpur area in support of 17 Div as described below.

402 (RB) Field Company (Maj I G Maclaurin), 4 Corps Troops, had moved to Moreh for work on the airstrip on 1st March but on the 16th were ordered into a defensive position on "Shrimp". Three days later they withdrew to "Assam ridge" Shenam as part of 100 Brigade's defensive position. Capt DP Bennett has given the following description of what he found when he joined the company: "The company headquarters occupied an entrenched position on 'Assam Ridge'. This was reminiscent of World War One, with deep communication trenches so that it was possible to move to any part of the position without exposing oneself to enemy fire. There were observation posts and dug-out sleeping accommodation. The only sign of human occupation above ground was the remains of a field hospital basha which the officers' mess cook Nadesen was using for a kitchen. He seemed to lead a charmed life, regarding the war as not his concern - he was after all a non-combatant - so he carried on regardless of the occasional shelling."

On 30th March the company received orders to return to Imphal but the OC requested to stay and the company remained fighting as infantry until 14th May. Capt WF Faulds, then Lieutenant IE, has given an account of his experiences with the company. The extract which follows is so typical that it can stand for the experience of many sapper units employed as infantry during the Imphal battle: "At the beginning of March 1944 I was ordered back to Tamu and, after working on making a light strip through the cemetery there, spent a couple of nights in the Moreh box when all units spent the night firing at each other. I believe that experience was a necessary and final initiation into the real education of the soldier as to the Burma jungle war.

"As part of 20th Division withdrawal from Tamu, I rejoined the main company on the Shenam saddle to serve in an infantry role but doing such sapper work as was required. Our position was on the south facing slope of the saddle looking directly to Tengnoupal (Map 4). Immediately behind us a battery of 25 pounders was sited and their location attracted the attention of both Japanese artillery and bombing aircraft.

"Our engineering skills were neither forgotten nor ignored and we were constantly involved in attending to the clearance of roadblocks, mines and booby traps on the road or blowing up roads to prevent the advance of the Japanese, particularly their light tanks. In many cases we were given tank support to carry out these tasks but as often as not were left to fend on our own.



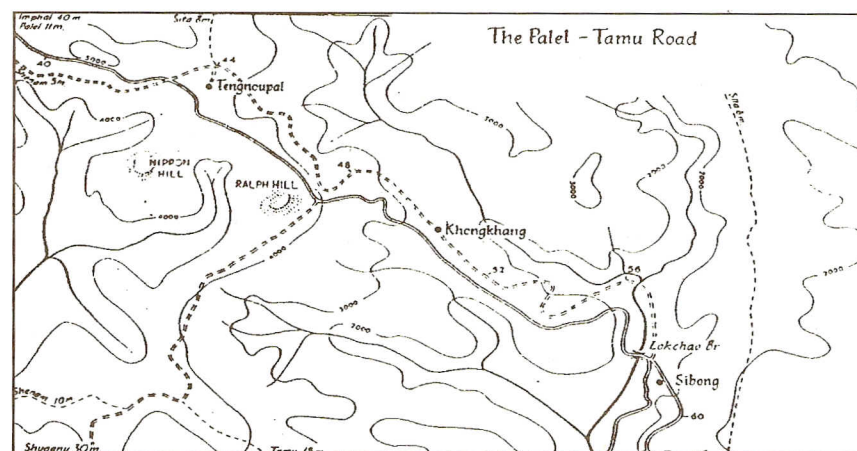
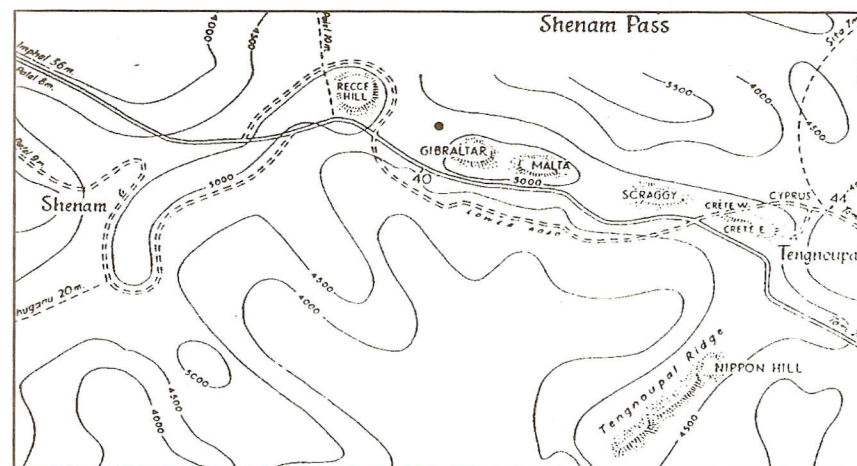
"Our other main task at this time was patrolling. This was a very physical and demanding role because of the difficult terrain. It inevitably involved climbing up and down hundreds of feet of the precipitous mountain sides around us so that we could reach the valley floors and make our way to our patrol areas. However there was such a need for information that patrolling never stopped and every attempt was made to surprise parties of Japanese and take prisoners.

"Our first and only gallantry award followed one of those patrols, when it stumbled on a party of Japanese and was put to rout, two of our number being shot whilst two were partially decapitated by the sword of the Japanese officer. Sapper Jaising Ghag who had been struck by the officer was left for dead. The sword blow had deflected off his neck cutting down into his shoulders and leaving him stunned and unconscious. When he recovered his senses some hours later he found that he had been robbed of his boots. However he helped himself to those of one of the two dead Japanese lying next to him. Then, remembering the purpose of the patrol, he searched the bodies and pocketed the identity disks. He then wandered in a daze for two days before being rescued by another patrol near our position. He was recommended for the IDSM which was supported all the way up to army group commander who downgraded it to MM.

"At that time we were also plagued with the nocturnal activities of JIFS who would approach our position after dark and ask to be let through the perimeter calling out in Urdu and pretending to be lost patrols of our own force. Such tactics meant that we depended greatly on passwords and if you arrived back after the time for the password change you had a real problem.

"So much for the patrolling. It was not the worst of our conversion to the infantry role. Daily we were subjected to shelling by the Japanese, both in early morning and evening. My Sikhs had dug themselves into a very deep and formidable trench system reminiscent of the first world war, complete with fire-steps, paradoss and dugouts. Unfortunately the mountain top we were perched on had been a village and in digging down we came across their refuse and grave areas. In consequence the trenches at night were run over by rats."

In addition to routine patrolling, on 4th April No 3 Section took part in a combined operation with KOSBs, three tanks and two Bren carriers to clear a road block consisting of a mined and excavated culvert. On 11th May Lt Faulds carried out a road demolition below "Scraggy Hill" under the fire of Japanese dug in only yards away. The company had the troublesome responsibility for the Dampol water point which lay half a mile forward of the infantry positions. Capt DP Bennett writes: "The PM platoon was based on the West slope of the ridge, about 200 feet below the road. There were two powerful pumps which had been lowered down the slope on wooden sledges. These pumped water from a stream up to the divisional water point where there was a canvas reservoir. Apart from maintaining a water supply, the platoon had to



Legend

ROADS... Allweather
Fairweather
Tracks
Mileage from Imphal

HILL FEATURES
Contours on the top sketch are at 500ft interval
Contours on the lower sketch are at 1000ft interval

play its part in defending that part of the ridge. But the position was on the whole pretty safe though at first I was alarmed to hear what I thought might be Japanese calling to each other in the jungle, before I was assured that the calling noises were due to monkeys. The water pumping station was so important that 20 Div CRE, Colonel Lucas, visited the position on most days. The slope down was so steep that a stout rope was fixed permanently to help people climbing up to the road (which I had to do three times a day for meals and briefing). Col Lucas, climbing with me back up to the road stopped at least three times on the way up; 'I do envy you your position, Bennett puff..such a marvellous view!' The pumps were unreliable and damage was caused by shelling."

On 25th April Jem Bajiram Khale lead a patrol out to Phalbung some four miles to the north-east. The company continued to act as infantry until 14th May when they were flown out to the Comilla, leaving transport and equipment behind. It was imperative for the Japanese to break through to Palel and develop this main road for their advance but to do so they had to force their way past Shenam where every hill top was stoutly defended and so the fierce battle continued.

The Tiddim Road

The main body of the Japanese 33 Div, having crossed the Chindwin at Kalewa, advanced eastward with the object of cutting off and destroying 17 Ind Div. On 8th March their patrols began to press on the screen 17 Ind Div had put out to defend the Manipur river crossing at Tonzang some twenty miles north of Tiddim. Other elements crossed the river south of Tiddim to work their way up the west bank and further block the road in the milestone 100-109 area where a Forward Supply Depot had been established. At such a distance from the rest of 4 Corps, 17 Ind Div was too exposed. On 13th March, in accordance with plans already agreed, the order to retreat was given. At the same time 32 Bde of 20 Div, including No 2 Sec of 91 (RB) Field Company (Maj JS Beddows), was ordered to MS82 on the Tiddim road to provide support. Seeing how rapidly the Japanese advanced, Lt Gen Scoones also moved 49 Brigade of 23 Ind Div from the Ukhrul area to provide back-up on the Tiddim road.

The Forward Supply Depot at MS109 was base for 465 Army Troops Engineers (Lt Col AJR Hill RE) with two Sapper and Miner field companies employed on road improvement, and a number of un-armed road-builders who were ordered to withdraw as soon as the threat became apparent. The two Sapper field companies, one being 24 (RB) Field Company (Maj JFW Rusted), hurriedly reinforced by 9 Jat Machine Gun Battalion, came under attack on 15th March. For three days they fought to hold off the enemy but then abandoned the position as indefensible.

Fighting their way through a series of road blocks, 17 Div crossed the Manipur river on 26 March, destroying the bridge behind them. By the 29th they had

joined forces with 37 and 49 Brigades at MS82 and had one more block to clear at MS72 before they broke contact with the enemy. Div HQ and 48 Brigade were withdrawn into corps reserve at Imphal while 63 Brigade went into action at Kanglatonbi.

The Ukhrul road (Mid March to mid April)

Strong Japanese columns advanced up from the Chindwin westward towards the Ukhrul area aiming to cut the Kohima-Imphal road and encircle 4 Corps. 50 Parachute Brigade, newly arrived in theatre and camping temporarily at MS 10 on the Kohima - Jessami track, was moving up to fill the gap left by the transfer of 49 Brigade to the Tiddim road. On the 19th March they were attacked by the Japanese 15 Div at Sheldon's Corner, a feature on the track named for Bill Sheldon of 91 (RB) Field Company who had been road building in 1942. The Brigade was forced to withdraw to a defensive position at Sangshak where they were fiercely attacked by elements of both Japanese 15 and 31 Divs.

At noon on 20 Mar 50 Ind Para Brigade ordered all remaining troops on the Kohima - Jessami track, 411 (RB) Parachute Field Squadron (Maj MJJ Rolt) and the support company of 153 Gurkha Parachute Battalion to move forward. There was difficulty in arranging transport, however 411 Squadron marched at 1600 arriving at Kohima at 2000 and there transferred to LofC transport. Reaching Imphal between 0530 and 0830 the unit moved on in divisional transport to Litan where temporary positions were allotted for the night.

There was panic all round the perimeter during the night 21/22 March and much firing by all units but no reliable reports of enemy presence were received. Spr Abdul Razak was killed and LNK Dattu Bongarde was wounded. The next day the squadron moved to a new position on the middle hill between the support coy of 153 Gurkha Parachute Battalion on the right and 4/5 Mahratta Light Infantry (MLI) on the left. Later in the day a detachment of 2/1 Punjab Regiment arrived and took up position on a hill to the north of the camp.

During the night 24/25 March there were several enemy attacks on the Litan Box. The first on the east end of the 2/1 Punjab Regiment hill succeeded in driving off one company. The 4/5 MLI and 153 Battalion positions were attacked later. The squadron position came under LMG fire and also received some grenades. The enemy penetrated the 4/5 MLI position and were caught leaving across the road at first light. Heavy execution was done by the 3.7 Hows and a Stuart tank. Jem Tassaduq Hussain, Nk Mohd Zaman and Spr Wahab Din were wounded. Troops patrolled forward of their areas and set booby traps on the approaches. On 27th orders were received to evacuate immediately. There was no transport so hasty demolition of unit kit and the supplies in Litan was organised before the squadron marched out with the rest of the garrison shortly after nightfall. This short extract from Field Marshall Slim's *Defeat into Victory*

describes the situation: "While this savage fighting was going on around Ukhrul and Sangshak, an equally severe action was developing at Litan on the Ukhrul road, about ten miles to the south-west. Here small detachments from the Parachute Brigade, hurriedly reinforced by a newly landed battalion of the 5 Ind Div, had dug in to block the road to the Japanese advance. Our positions were attacked by superior forces on the night of 24th/25th March and in spite of several counter attacks the battalion, having suffered heavily, lost its forward localities. Next day the Japanese attempted to cut the road in its rear. But now, in the nick of time, the troops of 5 Div flown from Arakan were coming into action, practically straight from their aircraft. 123 Brigade moved up the road, clearing it to six miles from Litan. The detachment at Litan was withdrawn on 28th, and 9 Brigade of 5 Div brought up."

With 50 Parachute Brigade for the time being not operational, 411 Parachute Field Squadron was placed under CRE 5 Div, and worked from camp in "Sardine box" near corps headquarters. Tasks included constructing a command post for HQ 5 Div, road maintenance, culverting and a water point. The construction and later dismantling of a 90ft SS Bailey bridge over a stream, to provide access to a field where Admiral Lord Louis Mountbatten came to address the troops, came as a break from the road maintenance chores. This was the squadron's first experience of Bailey bridging and it speaks highly of the training the young officers had had in OCTU that the whole operation went smoothly. Capt RA McClune, Squadron 2IC, and his orderly, who had been with HQ 50 Parachute Brigade at Sangshak and been caught up in the battle there, rejoined on 31st March after a tough cross-country march.

The Japanese westward advance continued rapidly. Within two weeks of crossing the Chindwin their 15th Div had cut the Imphal-Kohima road near Kangpokpi and then 31 Div had bypassed Kohima to cut the road from Dimapur the following day, 30th March, leaving the whole of the forces defending Imphal dependant on supply by air. The 4th Royal West Kents of 161 Brigade of 5 Div, newly flown in from the Arakan, reinforced the Kohima garrison while the remainder of the brigade held the high ground to the north-west. This small force put up such determined resistance that they held up much larger Japanese forces until 18th April when the road block between Kohima and Dimapur had been broken and the tanks could advance.

On 5th April the Ukhrul road was temporarily cut south west of Yaingangpokpi and on the 7th the Japanese reached Kanglatonbi twelve miles from Imphal on the Kohima road, forcing the stores dump to be evacuated. On the same day they took the summit of Nunshigum which overlooked Corps HQ at a distance of about four miles. The enemy were quickly removed, only to establish themselves even more strongly three days later. This time a major operation was needed to dislodge them. After an air bombardment and concentrated shelling by medium and heavy artillery, the 1/17 Dogras of 123 Brigade and tanks of the 3rd Carabiniers supported by the sappers of 20 (RB) Field Company,

successfully recaptured this critical position. 20 Company had flown in from the Arakan on 25th March with 5 Div and had already constructed a Class 30 stock span bridge on the eastern approaches to Imphal town.

Lt Gen Scoones now prepared for a counter offensive (see Map British/Indian Counter Offensive). 5 Div was to strike north and then west to deal with the enemy blocking the Kohima road. 23 Div was to clear the area south of Ukhrul and block the enemy communications to the north-west. To free 123 Brigade for an advance to the north, 37 Brigade took over at Yaingangpokpi on the Ukhrul road and 1 Brigade moved to Singkap for attack on Kasom where they joined forces on 15th. 17 Div now resumed responsibility for the Tiddim road with 32 Brigade of 20 Div under command, releasing 49 Brigade to rejoin 23 Div at Yairipok.

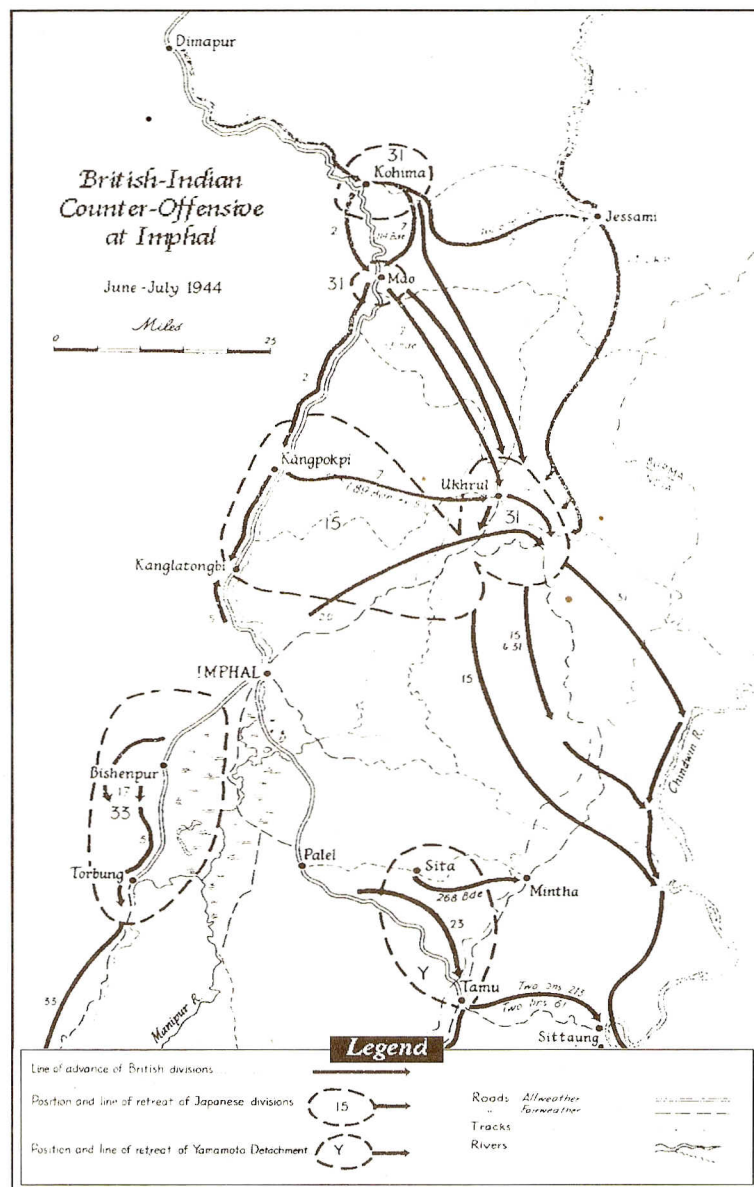
5 Div's advance up the Iril valley was heavily opposed and more strong resistance was met by 9 Brigade which had swung left to attack Mapao, which guarded the flank of the Japanese force attacking Sengmai. Mapao was occupied on 24th and 9 Brigade had linked up with 123 Brigade at Wakan where D Troop of 411 Squadron built a track under command of 20 Field Company.

By-passing the road block on the Kohima-Dimapur road, on 18th April 161 Brigade of 5 Div, but under command of 2 British Div, fought their way into Kohima and relieved the garrison which had managed to hold out so long. Aggressive Japanese forces still held parts of the ridge and it would take a further three weeks to clear the way.

Bishenpur (Mid April to July)

By the middle of April, 32 Brigade of 20 Div with its associated 92 (RB) Field Company had taken over the defence of the Tiddim road under command of 17 Div, covering point 5846 on the Silchar Track on the right while its left was protected by the Logtak lake at Ningthoukhong. Further defensive positions had been established along the road as far back as MS16, a little north of Bishenpur. While 32 Brigade had been getting into position, an enemy force had reached Kungpi unobserved and occupied Wireless Hill immediately to its east. There was hard fighting and the feature changed hands twice before 32 Brigade recaptured it on the 18th with support from the medium tanks of the Carabiniers. The approach was so extremely steep and jungly that the whole of 92 Company was needed to prepare the way for the tanks and their success was rewarded with a congratulatory note from the brigadier. But this success did not prevent the enemy from increasing the pressure, their patrols ranged out widely from Khoirok in the north and they infiltrated Potsangbum.

92 Company were in the thick of it. On 22nd Apr Hav Sadhu Singh and six sappers joined two platoons of 1/4 Gurkha Rifles on a forty-eight hour patrol to reconnoitre Japanese medium guns at Moirang. The intended destruction of



the guns could not be attempted as the defences were too strong. Elsewhere two sections were employed clearing fields of fire while a party set up and operated a water point at "Roadhead" at MS22 on the Silchar track (Note: mileages on the Silchar Track are measured from Imphal with Bishenpur at MS17). On the 25th a squad from No 2 Section was out clearing mines for the tanks supporting the 1/4 Gurkha Rifles attack on Ningthoukhong.

To the west of these operations the Silchar-Bishenpur track was being improved by a large force of engineers in the hope that it would provide an alternative line of communication. Headquarters 461 Army Troops Engineers, with an engineer battalion, a field park company detachment and four companies of the Indian Pioneer Corps, as well as CRE GREF with three field companies, two RE Commandos and a detachment of a mechanical excavating company were involved.

24 (RB) Field Company, shortly after their engagement at MS109 on the Tiddim road, moved to Bishenpur on 2nd April and noted in the War Diary: "The Bishenpur track runs practically due east to Silchar a distance of more than 100 miles. Owing to the ground formation of the hill ranges and the rivers running north-south it entails the crossing of six large rivers and seven hill ranges varying between 3000 and 4500ft above sea level. This necessitated on large lengths of track frequent hair-pin bends, in some places up to ten to twelve in each mile. It was on these bends that the main effort for improvement had to be made. The rivers are crossed by suspension bridges of up to 400ft span."

During the next week they worked on the suspension bridge at MS31, strengthening bridges and culverts and improving corners. On the 9th April, with the work between MS25 and 31 complete, the company moved to MS32 and that day had reports of 50 enemy on the track and heading for the bridge at MS51, where 362 (Madras) Field Company was doing similar work. The enemy threat increased as they blocked the road to Bishenpur, cutting off supplies, and, in a night attack, destroyed the bridge at MS51. This led to 24 Company concentrating on the defence of the bridge at MS31 and patrolling along the track. Increasingly isolated and out of contact with only two days rations in hand, on 19th the OC decided to join forces with 362 Company. This was confirmed on 21st April by a 4 Corps order for the company to be administered from Silchar. For the next four weeks, until 33 SS Brigade took over, 24 Company continued to act as infantry in defence of the track and on two occasions its patrols exchanged fire with the enemy. On 17th May, by then suffering severely from short rations, they marched out to reach base camp three days later. After refitting at Silchar, the company moved via Dimapur to Kohima to maintain and improve the road between MS48 and 65 until 17th August when they moved to build a 150ft double-triple Bailey bridge over the Lokchao river at Moreh.

Meanwhile the Japanese kept up a hot offensive. Bishenpur was shelled and in an air raid on 24th April LNK Shaukat Ali of 92 Field Company was killed at

the water point. On 27th April the whole of the company was called upon to wire the Gunner Box, just north of the town, and two days later to take over defence of part of the Bishenpur perimeter from 1/4 Gurkha Rifles. In this connection the history of the 9/14th Punjab Regiment observes ".....the perimeter to be defended by 92 Company whose fighting qualities as infantry were of a very high standard". A squad from No 1 Section worked with 1/4 Gurkha Rifles to clear the road block at MS20/6 as is well described in the citation for Hav Ghulam Din's Military Medal:

"Havildar Ghulam Din between 28 April and 1 May 1944 was in charge of a party of 15 Sappers at the 20/6 milestone on the Bishenpur - Silchar track under command of a force of two Companies of 1/4 Gurkha Rifles and 1 Troop 3 Dragoon Guards (tanks). From 1100 to 1300 28 April the squad made a tank track through jungle to the start point for the attack. They were then put in defence of the RAP until 1600 when they went to piquet a ridge overlooking a likely enemy line of approach. At 2330 they were relieved by an infantry platoon. At 0045 on 29 April they went 400 yards outside the box and worked until 0710 on a track through the jungle to enable two tanks to attack successfully the Japanese position. Between 0900 and 1330 on 30 April they were employed in filling two large 12 foot craters in the road under continuous medium machine gun and mortar fire until the road was repaired and the vehicle convoy bringing rations to two battalions (who were on half rations) was able to get through - the first convoy for 72 hours."

32 Brigade was ordered to recapture Potsangbung where the Japanese had established themselves in preparation for a co-ordinated attack on Bishenpur from south, west and north. The enemy position was softened up by artillery and bombing on 7th May and that night the 9/14th Punjab Regiment, supported by tanks, moved forward for an attack at first light. As the tanks of the 3rd Carabiniers advanced to support the action, one overturned in a nullah killing three and wounding three 92 Company sappers who were riding on it. Another squad from No 3 Section was in the thick of it mine-lifting with the Punjab Regiment. At first the attack made good progress but increasingly fierce resistance finally forced withdrawal. It required a coordinated assault by 63 Brigade on 12th to retake Potsangbung and several days more before the last of the defenders were eliminated. A week later 63 Brigade successfully pushed out to towards Sadu and established positions on the high ground, threatening the Japanese supply route to their forces around Khoirok.

By 21st May the tactical situation had become extremely confused as 48 Brigade, moving round from Wangjing through Shuganu, had established a block on the Tiddim road at Torbung thus cutting the Japanese supply route. The enemy response was typically aggressive. That night he overran 32 Brigade's administrative area at Bishenpur, put down a road block at MS10 on the Imphal road and attacked the headquarters of 17 Div nearby. It took another week of fierce fighting to clear the road block. In Bishenpur the garrison, 9/14th Punjab Regiment and a troop of 3rd Carabiniers, counter attacked and drove the

enemy out of the admin box; a party from C Troop, 401 (RB) Field Squadron under Lt K Ryden RE mine clearing for the tanks. The Japanese retreated to the north east corner of Bishenpur, dug in among the houses and put up such a strong resistance that it was not until two days later that they were eliminated. During this operation the 401 Squadron sappers swept for mines, laid coduroy to enable the tanks to cross a boggy section and cleared booby traps.

401 Squadron of 4 Corps Troops, less A Troop which was in the Arakan, had up to this point been busy improving crossings and routes generally to allow ready movement of tanks in and out of Imphal. This involved placing Class 30 stock span bridges, laying scissor bridges and bulldozing tracks. There was also help to be given to the 3rd Dragoon Guards rescuing bogged down tanks. On 3rd May B Troop was widening a nullah near MS22 on the Bishenpur-Silchar track to enable the recovery of a Lee tank and came under shell fire but were not interrupted. It was vital to deploy tanks to break the resistance of the Japanese defensive positions and as rain had made the going very difficult there was plenty of work for the troop. Jem Fazal Karim lead a party assisting in the recovery of two Lee tanks and a Japanese tank after the Potsangbung battle on 25th, another Lee on the Silchar track the next day and two more on the Imphal road two days later.

The last week of May saw 92 Company at work building an advanced dressing station, unditching tanks, mine-lifting, retrieving Japanese ammunition, dealing with UXBs and laying 500 yards of Somerfield track on the approach to brigade HQ. On 27th May the company bulldozer was immobilised by shellfire when filling a crater which the Japanese had blown in the road between Oinam and Bishenpur. As the bulldozer now blocked the road, a temporary diversion had to be made until two nights later when the immobile machine was removed by a D8 bulldozer with winch.

On 1st June 401 Squadron moved from Imphal to Bishenpur to add further resources to the task of getting the tanks across the waterlogged ground and reinforce the recovery effort as more and more tanks bogged down in the appalling conditions. Between 14th and the 26th of June the squadron had the task of building and maintaining the road where it crossed the Ningthoukhong Turel. With part under three feet of water the first solution of laying corduroy and filling the deepest place with logs, done under shellfire, did not survive. A Lee tank sunk the logs into the mud and the next day heavy rain washed the crossing away. In replacement an 18 foot span bridge of jungle timber was constructed; the timber being carried by the troops for 400 yards to the bridge site.

Although the Japanese attacks on Headquarters 17 Div and the administrative areas in Bishenpur had been repulsed, hard fighting continued round Bishenpur for another month, the main points of contention being the high ground in the neighbourhood of Roadhead at MS23 on the Silchar track, where 32 Brigade captured Wireless Hill on 7th June, and on the Tiddim road around

Ningthoukhong. On 8th June 92 Company moved into the 32 Brigade Admin Box at MS17 and on 13th took up defensive positions at Roadhead, continuing to support brigade with work on mule tracks, booby-trapping and the construction of a new ward for the ADS. The enemy remained so aggressively close that it was necessary to check the track to the water point for mines daily. On 2nd July company Subedar Ramzan Khan, representing the company, was presented to Lord Mountbatten on his visit to 17 Div.

32 Brigade continued fighting on the Silchar track until the middle of July when it rejoined 20 Div for operations on the eastern front. For a week 92 Company remained in a rest area at Wangjing and the leave roster was opened for men with twelve or more months service. On 22nd they joined 32 Brigade group on a short excursion into the hills to the east on a pack basis but were back for ceremonial on 7th August when the OC, Maj Clark, and Sub Jugat Singh were presented to the Viceroy who was making a formal visit to 20 Div.

As 48 Brigade pressed on down the Tiddim road, B Troop of 401 Squadron continued to provide support for the tanks, mainly mine sweeping. This went on almost continuously, sometimes under LMG fire, from 12th to 19th July when they reached the Moirang road junction. In the second half of the month the squadron replaced two scissor bridges with 30 foot stock span bridges and built a 50 foot SS Bailey bridge near Torbung.

Back at Bishenpur, 5 Div took on the responsibility for clearing the area to the east round the Silchar track while 17 Div fought its way down the Tiddim road. The Japanese withdrawal had been ordered on 29th June but the rear guards held their ground stubbornly and it was not until 17th July that 17 Div could claim to have reached its final objective by occupying Thinunggei. At this point, after several changes of plan, roles were reversed; 5 Div was to advance down the Tiddim road, pursuing the enemy relentlessly.

The Ukhrul road (1st April to 21st July) (Japanese offensive map)

In early April 23 Div began its offensive to deal with Japanese 15 Div in the Ukhrul-Kasom area, with 37 Brigade pushing up the Ukhrul road while 1 Brigade made a right hook through the hills. 91 (RB) Field Company, which had been responsible for developing and improving roads around Shuganu, accompanied the brigade and laid anti-personnel mines for the defence of brigade headquarters. On the Ukhrul road the brigade confronted the enemy at the Yaingangpokpi saddle about eighteen miles from Imphal and at the crest of the first ridge to be climbed after leaving the level plain. On 17th April No 1 Section was supporting the 3/5th Royal Gurkha Rifles attack on the enemy positions on the saddle, often forward of infantry and tanks, clearing mines in the road. The next day there was a bigger operation involving both Nos 1 and 3 Sections clearing paths for the tanks for which Havildar Pandurang Sanawne was awarded the Military Medal:

“On 17th April 1944, during the attack on Yaingangpokpi saddle feature, Hav Pandurang Sanawne showed great coolness and devotion to duty under heavy LMG and mortar fire by going ahead of the attacking infantry and tanks clearing anti-tank mines and booby traps. Altogether he and the men under him cleared about 40 mines and traps during the attack.” A rare word of feeling appears in the war diary: “one small party walking towards a bunker looking at the ground and using detector, whilst tanks standing back and firing at the bunker. Both sappers and the tanks reach the bunker together. All Japs killed or ran away.”

The attack was wholly successful and after erecting a 70 foot SS Bailey bridge to replace one destroyed by the enemy on 20th, the company moved up onto the saddle the next day. No 1 Section had the task of burning a Japanese supply dump about seven miles to the north at Sanakeitel and No 3 Section worked on track maintenance at Aishan four miles north of the Yaingangpokpi saddle. At the beginning of May the Bailey and SBG bridges were dismantled and back-loaded and a Class 30 elephant bridge constructed. On 15th May 20 and 23 Divs exchanged roles. 91 Company moved with 37 Brigade to the defence of Shenam while 100 Brigade took over the Ukhrul road sector and 481 (RB) Field Company took over from 91 Company.

Brigade headquarters and 481 Company dug in on the crest of the ridge, brigade headquarters and two platoons of sappers on the central knoll known as “The Keep” and the rest of 481 Company on a feature known as “Bastion” about 400 yards away. On 8th June a squad from No 1 Platoon supported an attack by the 14/13 FF Rif on Thawai, a hill-top village about two miles to the south east, and blew bunkers with pole charges. On the night of 10/11th the enemy attacked “Bastion” and the following account is based on a report written only two or three years after the event by Maj RCH Greet, who had been 2IC at the time. He and the OC (Maj MI Pritchard) had gone back to B echelon that evening leaving Capt Smith (from 20 (RB) Field Company) temporarily in command: “At about 1900 the Jap started a sporadic but accurate shelling of the whole brigade position. The field company positions were well dug in and casualties were only slight. At about 2100 the shelling gave place to the unmistakable noise of infantry moving up the hill to attack. They came at the platoon in ‘Bastion’ from two directions shouting and firing as they came. Every time they loomed out of the inky darkness they were halted by the fire from the position and finally driven back into the night. This process was repeated several times and it was not until about midnight that a particularly ferocious attack carried the Jap into the ‘Bastion’ perimeter trench.

“From then confusion reigned and there was no way of distinguishing friend from foe. Bitter and isolated hand to hand combats were now taking place all over the position, and Capt Smith realised that he was outnumbered and that a stay longer meant being mopped up piecemeal. He accordingly ordered a withdrawal to about fifty yards outside the position. He rallied about 15 men on

this new position and immediately set out to counter attack 'Bastion' - but by now the enemy was well established and when he himself was seriously wounded the attack was halted - and all the sappers who could made their own way to 'The Keep'."

When the news reached them at B Echelon Maj Pritchard and Capt Greet quickly rejoined what was left of the company there. Next morning a counter attack was mounted. Three Stuart tanks of the 7th Cavalry and a platoon from 14/13th Frontier Force Rifles were to assault frontally, the OC with 40 sappers to assault from the right and Capt Greet with 20 men to work round to the left. His memoir continues: "At about 0900 the tanks rumbled slowly forward with one section of infantry moving and sheltering behind each. I could not see the OC's party but moved abreast of the tanks on the left. We were fortunate in having a covered approach but unfortunate in getting a mortar shell as we were starting which killed instantly my orderly and two other sappers. However we pressed on and were able to crawl to within about 40 yards of the enemy position. At this stage I could not understand why we were receiving so many casualties as we seemed to be to an extent defiladed from enemy view - suddenly a move on the left attracted my attention - but I was too late - a Jap sniper toppled from a nearby tree riddled with my bren gunner's bullets. He had accounted for five or six of my men and had he remained still I believe he might well have hit all of us without being seen.

"We were now near enough to look straight into the loopholes of "Bastion" and put down accurate fire. Misfortune overtook us however as the leading tank was hit and stopped - the second pulled out to pass and was also hit and stopped. This exposed the infantry to fire from point blank range and they were forced to ground. I found only five of my men remained unwounded and the OC's party had suffered similar casualties."

Reinforcements soon arrived in the form of three more tanks and a company of 152 Indian Parachute Battalion which provided sufficient weight to break the Japanese resistance and "Bastion" was retaken.

Maj Pritchard and Capt Greet, who were due on courses in India, stayed on for a few days to reorganise the company as best they could, but seldom can a field company have suffered such an unsettling misfortune. With Lt Colvin killed, only two of their original officers remained. They had lost fifteen IORs killed and a similar number wounded. Sub Bachan Singh was commanding No 3 Platoon but was suffering from an earlier wound, and the company office, with all the records, had been lost. Maj CH Cowan (from 28 (RB) Field Company) and Capt KA Parrott arrived as temporary replacements and had the unenviable task of coping with operational requirements in a new formation with a badly shaken company. It was not until the end of July that more permanent officers were in post:- Maj AC Lewis, Capt AN Fradgley and Lt KDG Phillips.

Until 5th July the company continued to perform the infantry role on "Saddle" and work on the road, clearing drains and camp entrances. On 7th July No 2 Platoon under command of 4/10 Gurkha Rifles lifted twenty mines on the road to "sausage" and the next day there was a large landslide of eight foot boulders to be cleared just short of Litan. Damaged by the monsoon, the road required much maintenance to keep it open and the whole company was heavily committed here until 21st July when 20 Div took over from 23 Div and the company moved to a rest area near Thoubal.

The Imphal - Kohima road (Japanese Offensive Map)

At the end of April Japanese 15 Div still had firm control of the Kohima road from the hills on both sides and were waiting for reinforcements from their 33 Div before launching their attack on Imphal. But 33 Div was now too weak to fulfil the plan due to the losses it had sustained from the strong defence of the Kohima garrison, the unexpected arrival of 161 Brigade there and the paucity of supplies getting through over their very extended supply line. The strongest enemy positions were on the hilltops to the east of the road with the Mapao ridge still in contention with 9 Brigade. 20 (RB) Field Company were supporting the brigade and were allotted a troop of 411 (RB) Parachute Field Squadron to make a track suitable for 15cwt 4x4 trucks up to the Mapao position which was completed on 11th May.

The arrival of 89 Brigade of 7 Div on 7th May compensated 5 Div for the absence of 161 Brigade and gave 4 Corps the additional forces needed to open an offensive northward. It was to be a tough struggle. The road ran in the valley of the Imphal Turel flanked to the east by a series of steep, jungle-clad peaks rising to about 800 feet above the valley floor. To reach them the troops had to cross the Turel which turned into an unfordable torrent after a few minutes of monsoon rain.

During the second half of May 20 Company retrieved a SBG bridge from Pukhao in the Iril valley, improved the mule track to Mapao from the Imphal Turel and carried out track maintenance, made all the more necessary by the opening of the monsoon on 20th. Having driven the Japanese out of Mapao, on 1st June 9 and 123 Brigades advanced up the Kohima road meeting heavy resistance in the foothills below Molvom. While holding the heights, the Japanese also blocked the road by blowing culverts and bridges and setting up manned road blocks, creating a series of obstacles. 9 Brigade met major resistance at what was known as "London Bridge" and on 6th June mounted an attack to break the block. The 3/14th Punjab Regiment made a left hook through the hills to cut the road behind while 2nd West Yorkshire Regiment, supported by tanks of 7th Cavalry, assaulted a low hill on the left of the road. The tanks were held up on the road by mines, and Lt Yearsley of 20 Company, in charge of the Sapper mine-detecting party that went forward with the leading infantry platoon, was wounded. It was this and a further action on the 16th that earned

LNk Babu Singh of 20 Company the MM as the citation describes:

"On 8 Jun 44 in the Imphal area, LNk Babu Singh was a member of a sapper party which accompanied an infantry company onto its objective - a hill called "Squeak", west of MS114, Imphal - Kohima road. The company attacked and were held up, so dug-in in contact with the enemy, who at once counter-attacked and continued to do so for the 12 hours of darkness. He also sniped continuously and heavily from all round and from close range all the next day. There was no water available. LNk Babu Singh showed great cheerfulness and personal courage throughout the whole operation and his example was responsible for the fact that his party was able to successfully hold a section of the coy perimeter.

"Again on 16 Jun 44 at MS121/2, Imphal - Kohima road, this NCO showed great courage. He crawled forward under very heavy and accurate mortar and small-arms fire to a road block which consisted of four or five 15 inch trees felled across the road. He then attached the tow-chain of a tank to one of the trees, thus enabling the tank to pull it away under cover and remove it. This action was repeated in spite of the heavy fire, until the road block was cleared. The tanks were then able to proceed and neutralise the enemy positions which were holding up the infantry."

In mid-June 411 (RB) Parachute Field Squadron, having completed a 40-140-40 foot, three-span Hamilton bridge over the Iril river on the Ukhrul road, moved to Kanglatonbi and joined in the operation to clear the Kohima road. They made a mule track into the hills west of Safarmaina and on 22nd June demolished a stone wall road block three miles further on. That was the great day when 2 British Div and 5 Indian Div met at MS108 and the road Imphal to Dimapur was open. 411 Squadron provided the timber roadway needed to let the generals' jeeps cross the scissor bridge placed over the gap at the meeting point.

Although it was soon possible to run supply convoys there was hard fighting to be done before the Japanese were finally cleared from the eastern hills and plenty of work for 20 Company hacking tracks up the steep slopes and getting supplies across the swollen Imphal Turel. They put in bridges where they could and otherwise constructed aerial ropeways or flying ferries which 411 Squadron dismantled and back-loaded a fortnight later when enemy resistance had finally collapsed. One unusual design of bridge has been described by Capt PA Toole as: "Among the stores discovered in the equipment at Kanglatonbi nearby was an amount of steel cable. From memory the river was about 10m wide and the cable was cut into about 8 lengths about 15m long. The ends of each were formed into a loop with bulldog clamps, taken across the river and secured on the far bank. Then, using block and tackle, they were tensioned as taught as possible. The process was repeated for the remaining lengths spaced 30cm apart. Cross-pieces of small local logs formed the roadway which was earthed to make it look natural to the mules. Side screens of hessian were erected and the whole formed a successful bridge for mules and men alike."

In early July C Troop of 401 (RB) Field Squadron built a 110 foot DS Bailey bridge on the track to Molvom from MS16 on the Kohima road, the squadron's first experience with Bailey bridging. On 8th July 411 Squadron came under command of 23 Div briefly and erected a Bailey bridge on the track from Wangjing to Sita before reverting to command of 50 Parachute Brigade on 12th July. The Squadron worked on the Bithess aprons at Tulihal airstrip, when weather permitted, until embussing for Secunderabad on 30th.

Shenam - Mid March to July (Maps page 425)

The Japanese attack on north end of Moreh had been driven off on 26th March but that evening a serious situation developed on the Shenam Pass when a small enemy force infiltrated on to the Tengnoupal ridge and dug in at its highest point, which thereafter became known as "Nippon Hill". (see Map 4) This did not prevent 100 Brigade from establishing a chain of strong, mutually supporting positions covering the pass while 32 Brigade withdrew from Moreh to form a mobile reserve at Palel. If the Japanese were to achieve their objective and take Imphal, they were compelled to force a way through Shenam, as only the Tamu-Palel road could provide a supply route usable by vehicles. Equally its defence was absolutely vital to the British as, once through the pass, the way would be open across the plain, and so the struggle continued. Withdrawing with 100 Brigade from the Kabaw valley at the end of March, 481 (RB) Field Company was employed in the infantry role in the Shenam garrison. Company patrols contacted the enemy five times, inflicted casualties and captured a light machine gun and various equipment. In the second half of May the company took over the defence of "Saddle" and on 8th June a section of No 1 Platoon took part in an attack by 14/13 FF Rif, blowing Japanese bunkers with pole charges.

"Nippon Hill" was taken by 1st Devons of 80 Brigade supported by the whole of the divisional artillery on 12th April but, after heavy shelling, the enemy retook it on 16th. However they were not successful in their attempt to bypass Shenam on the north-east through Sita and renewed their direct assault on the pass. By the 20th they had overrun "Crete East", and "Cyprus", now isolated, was abandoned. Forward defences on the Tamu-Palel road were now "Crete West" and "Scraggy" where fighting continued for the next three months.

During the second half of May 23 Div took over the Shenam defence from 20 Div and 91 (RB) Field Company relieved 481. An important role was the revetment of the field defences on the features Malta, Recce Hill and Gibraltar and restoring the damage done by heavy shelling. It was on Malta that Naik Dalip Singh won the first of his two Military Medals, as the citation describes:

"On the evening of 19 May 44 in the Shenam area on the Palel - Tamu road Nk Dalip Singh was a member of an engineer detachment on the Malta feature. As a result of enemy shellfire the wire in front of the forward positions had been virtually destroyed in a number of places, and, as there was no other wire available to fill the gaps, Nk Dalip Singh was ordered to take a party forward

and lay booby traps and AP mines. He cheerfully lead his detachment on the exposed forward slope and, despite enemy sniping and shellfire, spent nearly two hours carefully mining and booby-trapping the gaps in the wire obstacle.

"Throughout this period he set a magnificent example of coolness and courage to his men, personally supervising their work and seeing that it was done properly. At the end of it he gave a very detailed report of the exact areas in which mines, etc. had been laid."

The citation is recommended and signed in person by GOCinC, Fourteenth Army Lt Gen WJ Slim.

Until the middle of July the company continued to fight as infantry and worked many hours day and night, sometimes the whole company together, much of the time restoring the field defences of Malta.

Fighting for the Shenam pass continued relentlessly and it was not until 10th July that 23 Div was strong enough to order the advance; which was delayed until the 24th by violent storms in the mountains which washed away tracks and brought streams down in spate. The plan involved a three-pronged attack on the critical defile and river crossing at Sibong with 1 Brigade on the right seizing Nippon hill, while 49 Brigade moved wide out to the left through Sita to establish a road block at Sibong itself. 37 Brigade was then to attack down the main road. In an assault on the Japanese position on "Scraggy" by B Company of the 3/10th Gurkha Rifles on 27th July Spr Fauja Singh of 91 (RB) Field Company won the Military Medal. The citation describes the action:

"As the attack proceeded a large bunker was located which was holding up the infantry and preventing the capture of the feature. Grenades were thrown at it but the enemy could not be dislodged from inside so the sappers were called forward with their demolition charges. Covered by our LMGs Sapper Fauja Singh with complete disregard for personal safety and under heavy enemy LMG and small arms fire dashed forward, placed the charge on the roof of the bunker and pulled the igniter. As a result of the explosion the bunker was completely destroyed, three Japanese being killed and one taken prisoner in a very dazed state. The infantry were then able to proceed and complete the capture of the hill."

In spite of desperate enemy resistance and further delays due to impassable torrents, the road as far as Sibong was secured by 28th. It was then possible to start repairs to the road which had been extensively damaged by enemy action and the weather. The road was vitally necessary in order to move forward the guns and vehicles needed to support an attack on the Japanese prepared positions in the hills covering Moreh. After their capture the advance into Burma could start.

305 (RB) Field Park Company

While the actions of most sapper units can be related to tactical operations, the work of 305 (RB) Field Park Company continued throughout the period.

The company had been in the area since 1942 and continued to serve as 4 Corps Troops field park during the Japanese attack on Imphal. On 6 March 1944, in preparation for the expected attack, the OC, Maj WG Prow RE was appointed commander of Imphal B Box and there was work to be done on the box defences. The company provided a water supply system and electric lighting and carried out improvements to the accommodation for the new corps HQ after their move from Ranchi. The Japanese launched an air raid on 16th March which caused considerable damage to Imphal town and essential services. The ensuing panic among the inhabitants resulted in only 10% of the civilian labour turning up for work. On 23 March the company moved to a site alongside the engineer stores depot in "Elephant Box". In April the company retrieved stores from Palel and Moreh and the war diary reports "making tables and chairs". On 12th May they were ordered to provide a guard of one Havildar and 18 men on the POW cage.

On 11th June the company became very popular when it opened the Imphal cleansing centre capable of providing hot showers for 100 men per hour. Work for corps headquarters continued with the installation of a 4 inch victaulic water main and until the 13th August the company still had responsibility for electricity and water supply at Ranchi which were met by detaching Jem Karim Ali and 27 men.

9 (RB) and 15 (RB) Bridging Platoons

Unfortunately the pages of 9 Bridging Platoon's war diary covering the period of this chapter are missing. In the early stages they were involved in 20 Div's operations in the withdrawal from the Tamu area, but later on they were diverted to the Tiddim road and came under the command of 5 Div. Their vehicles and experienced drivers were much in demand for impromptu transport jobs, and the sappers took a share in perimeter defence. During the later advance towards the Manipur River the platoon delivered two complete sets of SBG and two sets of FBE, calling for a good standard of driving considering the appalling condition of the road, much of which had been washed away, and the unwieldy nature of the loads. Capt Pilditch, the platoon's tireless commander, was mentioned in despatches.

There is even less record of 15 Bridging Platoon's activities. They were in Imphal at the time of the Japanese air raids in March, and in all probability were associated with the Corps Field Park Company. Capt Mullan remained with them and at the ending of the siege in August, they were busy in the rehabilitation of the dump at Palel.

Field Broadcasting Units

Official records show that three Field Broadcasting Units (201, 202 and 203) were raised by the RBS&M Group. Little is known about them but it is likely that they were small sub-section sized units of mainly electrical tradesmen, probably under a jemadar, administered by HQ Corps Troops. Operational deployment would have been controlled by divisional and brigade intelligence staffs. One of the units (number not known) was deployed during operations on the Bishenpur track in late April 1944. Maj Gen IH Lyall Grant MC who was then OC 70 (Bengal) Field Company writes in *The Turning Point* (a history mainly of 17 Div in the defence of Imphal): "An armoured broadcasting vehicle appeared on the track, broadcast some popular Japanese folk songs and called on the Japs to surrender. They even said 'we are now going to shell your position. Soldiers, please stay in your trenches and officers please stay outside them!' "Much to most people's surprise the enterprise may have had some effect for within the next week two unwounded Japanese actually did surrender, a very rare event."

The Roll of Honour on the Kirkee war memorial shows that two of the units (201 and 203) were in Burma front operations between October 1943 and June 1944 and that each lost a sapper (probably died of wounds) a short time later.



Maukkadaw North Bank

Nominal Roll of those known to have served with RBS&M units in the defence of Imphal

HQ 5 Division Engineers
Lt Col ECR Stileman
Capts AR Ballantyne & D Brant
Lts WG Fulton & EP Linton
Lts DW Huggins & TC Randall

20 (RB) Field Company
Maj PG Hatch OBE MiD
Capt Holland
Lts PA Toole & JK Yearsley MC MiD
Hav Narayan Kharade MiD
Hav Sarwan Singh MiD
Nk Kartar Singh MiD
Nk Bhagwant Nagar MiD
Nk Shamas Din MiD
LNk Babu Singh MM

411 (RB) Parachute Squadron
Maj MJJ Rolt MiD
Capt RA McClune
Capts W Scott Moncrieff & T Stanton
Lt GDI Cordon
Subs Baskerao Scinde & Lal Jhan
Jem Shanker More

24 (RB) Field Company
Maj JFW Rusted
Capts RL Anand & JM Walsh
Lts HC Butler & RWS Williams

401 (RB) Field Squadron
Maj PG Burrell MiD
Capt AWG Harley
Lts WS Adams MC & EHP Berry
Lt K Ryden MC MiD
Sub Bhagwantrao More MiD
Sub Shah Zaman MiD
Nk Mohd Din MiD
Nk Muzaffar Hussain MiD
LNk Bapu Patil MiD
Spr Narayan Thakar MiD
Spr Wahid Bax MiD

305 (RB) Field Park Company
Maj WG Prow
Capts Lewis & R Lishman
Lts R Beaton, TL Satchwell, PA Toole
Jems Karim Ali & Sheik Usman MiD
Hav Nazir Hussain MiD

15 (RB) Bridging Platoon
Capt JN Mullan

HQ 20 Division Engineers
Lt Col ARS Lucas OBE
Capt RE Greenway
Lts P Jessop & EP Linton
Lts TDS Rowland & GF Webb

92 (RB) Field Company
Maj JH Clark MC* MiD
Capts SR Holt & JB Irving
Lt AP Cumming MiD
Lts TG Sandeman & R Horne
Sub Jagal Singh & Jugat Singh
Sub Ramzan Khan MC MBE MiD
Jem Bhagwan Sakpal MiD*
Hav Ghulam Din MM
Hav Sadhu Singh MM
Nks Arjan Singh MiD & Kehar Singh MiD
LNk Nizam Din MiD
LNk Shaukat Ali MiD

481 (RB) Field Company
Maj CH Cowan
Maj MI Pritchard MiD
Capt AN Fradgley
Capts RCH Greet & K Parrott
Lts WM Colvin & TW Prentice
Lts TDS Rowland & JR Stagg
Subs Bachan Singh MC & Aba Sable MiD
Jem Nihal Singh MiD
Spr Kartar Singh MiD

91 (RB) Field Company
Maj JS Beddows
Capt HE Allison
Lt Riaz-ul-Haq
Sub Bostan Khan MiD
Jem Mahadeo Nilkand MiD
Jem Mohd Khan MiD
Jem Udham Singh MiD
Hav Pandurang Sonawne MM
Nk Dalip Singh MM
Spr Fauja Singh MM

402 (RB) Field Company
Maj IG MacLaurin MiD
Capts AW Clarke & T Macdonald MiD
Lt WF Faulds MiD & Lt AB Shepperd
Jem Bajiram Khale

9 (RB) Bridging Platoon
Capt PM Pilditch MiD
LNks Lal Khan & Mian Mohd
Spr Faqir Moh'd

CHAPTER NINETEEN

ADVANCE TO MEIKTILA & MANDALAY

• AUGUST 1944 TO MARCH 1945

5 Indian Division	HQ Engineers 20 (RB) Company
19 Indian Division	29 (RB) Company
20 Indian Division	HQ Engineers 92 and 481 (RB) Field Companies
36 British Division	HQ Engineers 30 (RB) Field Company 324 (RB) Field Park Company 401 (RB) Field Squadron
254 Tank Brigade	HQ
457 (RB) Forward Airfield Engineers	24 (RB) Engineer Battalion 363 (RB) Field Company 402 (RB) Field Company
4 Corps Troops	305 (RB) Field Park Company

Compiled by Major AN Fradgley MBE

Many of the sources linked with the introduction of Part IV have provided the overall background to this chapter. In particular *Defeat into Victory*, *The Indian Engineers 1939-47* and the regimental histories of 3rd Dragoon Guards and 9/14 Punjab Regiment. Articles in the RE Journals by Lt Col PA Easton (Dec 46 and Sep 48) and Colonel A Murray (May 47) and other articles written by Maj Gen RM Rau AVSM and Maj WF Faulds have provided much of the information on sapper events. Dates, names and other details have been taken from the war diaries of all the RB units involved and those of HQs 32 and 100 Infantry Brigades, 254 Tank Brigade and 1 Northants, 2 Border, 14/13 FFRif and 4/10 GR Infantry Battalions. The memoirs of Majs C Baillie and DW Boydell ERD, Capts DP Bennett, Rev RVP Cummings, PA Toole and DS Young MC and the compiler have provided a direct link with the events as they took place.

Introduction

By August 1944 the tide of war had turned against the Japanese who were everywhere on the retreat. The monsoon rains had turned tracks into swamps, and disease and malnutrition had added to the Japanese 15th Army's miseries as it struggled to avoid disintegration. Even at this early stage, General Slim's

14th Army's intention had been made clear. Despite the near-impossible conditions, the enemy was to be closely pursued with the aim of obtaining a foothold over the Chindwin before the end of 1944. Meanwhile, supplies and resources in base areas were to be built up to sustain a major offensive in central Burma in 1945.

Operations by 15 Corps in Arakan were no longer the responsibility of 14th Army and are not covered in this chapter. However, 36 British Div is included, despite having passed to Gen Stilwell's Northern Combat Area Command (NCAC) in mid-1944 to compensate for the fly-out of the exhausted Chindits.

The events in this chapter are split into three phases:-

Approaching the Chindwin, August to December 1944

36 British Div approach Katha - 401(RB) Field Squadron in the Kabaw Valley - 5 Indian Div pursuit towards Tiddim - 20 Indian Div and 19 Indian Div arrive

The advance to the Irrawaddy, January to mid-February 1945

36 Div on the Shweli - 19 Div gains a foothold - 20 Div reach the Irrawaddy - 4 Corps start down the Myittha Valley - The Forward Airfield Engineers arrive

Crossing the Irrawaddy, mid-February to March 1945

36 Div reach Maymyo - 19 Div take Mandalay - 20 Div cross and break-out - 4 Corps strike to Meiktila - Airfields across the Irrawaddy

The narrative describes a front stretching from Myitkyina in the north, on the left, to Meiktila in the south, on the right. The reader will find that each of the three phases starts with events on the left, with 36 Div, and then moves across to the right.

36 Division Advance to Katha

In July 1944 36 British Div was switched from the Arakan to come under General Stilwell's American command on the northern front (NCAC). The division consisted of two British brigades and among the divisional engineers, HQRE, 30 Field Company and 324 Field Park Company were all Bombay units. The monsoon rains had started, turning all existing roads and tracks into swamps and running drains so that normal movement by MT was impossible. Furthermore, the construction of the Ledo road had not yet reached Myitkyina, so the division had to be flown in on a light scale leaving all vehicles except some jeeps and trailers behind. The two brigades were in replacement for the Chindits and Marauders who, exhausted and depleted after their prolonged battles and capture of Mogaung, 28 miles south-west of Myitkyina, had been flown out to India. The division's task was to move south down the railway corridor toward Mandalay, and cover Stilwell's right and southern flank.

30 Field Company

After a spell refitting in Shillong, 30 Company (Maj RL Swain) travelled by road and rail to Ledo from where they flew in to the airfield at Myitkyina on 10

July. Lt David Young remembers: "The main Myitkyina to Mandalay railway line was built on an embankment to prevent flooding during the rains, so was the one place to be sure of some dry land. It was along this line that 30 Company had to start work. There were no railway engines as the Japanese had sabotaged them, so we employed jeeps with rail wheels instead of tyres. The line crossed many small culverts and some larger bridges, mostly damaged or destroyed."

Driving the jeeps called for great skill. The usual train consisted of two 10-ton box cars, with a maximum speed of 25mph, and the best method of starting was to let in the clutch with a bang and set the wheels spinning. Stopping was achieved with the engine switched off and driven against compression, but required a 500 yard run-down. Most bridges over 40ft span had been demolished, craters were frequent, points usually missing or blown, and long stretches of rail removed. To make things more difficult, nothing bulkier than a fishplate could be flown in, so everything salvageable had to be incorporated in improvised repairs. Useful RSJs came from the old sugar factory at Sahmaw and previously-felled baulks of teak, wooden floorboards and even brushwood were pressed into service. In general the ground was too waterlogged for piling and it was found better to use framed trestles (preferably single bent). The line was made good to class 24, usually being opened some 10 days behind the leading infantry. Again, David Young remembers: "Through August and September we moved steadily along the line, through Mogaung, recently taken by the Chindits, then Mignon and on to Pinbaw. Here we tackled one of the longer crossings — 225 feet, partly piled piers and partly trestles across the Namkwin Chaung. In October the company reached Hopin, then Nyangon and Mohnyin. It was on this stretch that a saloon coach, which had been the touring saloon of the General Manager of the Railways, was discovered in a siding and found to be in good working order. General Frank Festing, divisional commander, immediately took it over as his advance HQ and insisted that it be taken as far forward as line repairs allowed. Hopin was a grisly sight when we passed through as the remains of an earlier operation, presumably the Chindits, had left many dead bodies now decomposing."

From September the weather had improved steadily, and by November the rains had stopped altogether. The divisional transport began to arrive and also the artillery. The company acquired some captured Jap vehicles in October, and in November they advanced through Kadu to Mawlu where the platoons were detached to the infantry battalions of 72 Brigade, preparing command posts and reconnoitering for mines. In early December the CRE (Lt Col PA Easton) carried out an aerial recce to the Naba area and 72 Bde, followed by the newly-arrived 26 Ind Brigade, was ordered to make a crossing of the Irrawaddy at Katha, and move south-east. No equipment was available apart from some part-worn Ranger boats and 9.8 and 22hp outboard engines, suitable for personnel

and light stores only, but fortunately some Japanese pontoons had been found on the airfield at Indaw, sufficient to make three class 9 rafts.

Ferrying at Katha started on 15 December. To avoid sandbanks, the crossing was about one mile each way, and the brunt of the work of preparing approaches, making brackets to fit outboard motors to the ranger boats, and making the rafts fell to 30 Company. Some jeeps were taken across on a petrol drum raft, and on 19th the first of the class 9 pontoon rafts was ready and had ferried some of the 15cwt trucks. There was no real opposition and by 22 December the three battalions (9 R Sussex, 10 Gloster and 6 South Wales Border) were across. By 26th three class 9 rafts were in operation, making about 30 trips a day. Lt Rau, newly-arrived and in his first posting had accompanied a R Sussex patrol to Pyagyaung on the far side to find out about roads, bridges, and water supply prospects, and Lt McNaughton had cleared a small field of Japanese anti-tank mines as well as searching for mines left behind from the Chindit operations. Another week's continuous rafting saw 72 Brigade transport, 178 Field Regiment RA, a GP Transport company, 100 mules and most of Div HQ safely across and heading towards the Shweli river.

324 Field Park Company

Meanwhile, in August, 324 Company (Maj George Mackay) had left the divisional base at Moran in Assam and arrived in the Myitkyina area with a reduced scale of transport. During September a base of sorts was established near the railway and the work of finding, sorting, salvaging and forwarding stores of all natures began. They were sent forward by rail, a process much facilitated by the fact that by this time the CRE was in command of the whole railway operation. The workshops platoon was more than busy manufacturing camp and construction items, in particular, steel spikes and dogs of which there were never enough.

At the end of October, the company moved forward to set up an advanced park at Mohnyin. The field platoon had been assisting in ferrying at Loilaw and in recovering cribs and girders from sites where the improved weather conditions had allowed more permanent repairs.

Another move to Henu in November took the company to the scene of the earlier Chindit operations at 'White City.' Here they recovered two American airborne D2 angledozers, eagerly pressed into service and found invaluable.

In December, with the advent of the dry weather and the arrival of their MT the company moved forward through Pinwe and Kanni to Katha. The Japanese pontoons were recovered from Indaw and three class 9 rafts manufactured. Assault boats were overhauled and a workshop was set up to receive the Ranger boats and 22hp outboard motors being flown in. In addition to 72 Brigade's operations at Katha, support was also required for 29 Independent Brigade which

was moving down the west bank preparatory to crossing the Irrawaddy at Tigyaing, 30 miles south. There were also the very considerable needs of the other engineers in the division, the engineer battalion and the newly-arrived Madras field company.

In the Kabaw Valley

In August 1944 the entrance to the Kabaw Valley was one of the sectors where pressure could be brought to bear on the retreating Japanese. Tamu, a grim chanel, had been taken on 31 July and on 6 August 11 East African Div came under command 33 Corps with the task of establishing control, and a possible bridgehead over the far bank of the Chindwin as far as Kalewa. Whilst one brigade pushed east toward Sittaung, another brigade started the difficult and waterlogged route to the south. The August rain fell continuously for 21 days at five inches per day and all vestige of last February's dry-weather road had disappeared. Sometimes waist deep in mud, the leading infantry struggled forward to Htinzin which they reached on 21 August. All maintenance was by supply drop. Earlier in the year the feasibility of using tanks on the road to Kalewa had been discussed and the Tank Brigade opinion was that it could be done. However, the Japanese onslaught in February had forestalled any attempt so it is not surprising that the topic should be now resurrected, with the result that an armoured column, to be known as Bellforce, was created to enter the valley and push south in support of 11 East African Div.

The column consisted of

C Sqn 7 Cav (Stuart tanks)

D Coy 3/4 Bombay Grenadiers

B Tp (Mahratta) 401(RB) Field Squadron (Lt WS Adams)

Recovery detachment, part of Valentine bridge-layer troop, and some transport.

It formed in the Imphal area and moved with great difficulty over the washed-out road forward of Palel to Tamu. At places the tanks had to unload from their transporters so that the latter could be winched over, or round, collapsed sections.

A start was made toward Htinzin on 3 October but conditions were so bad that little progress could be made in the first weeks. B Troop was fully occupied in unditching both tanks and vehicles. The most useful vehicle was found to be 7 Cav's D8 recovery tractor which, in places, succeeded in towing a train of fourteen soft vehicles through the mud. B Troop led the way in a tracked carrier with a marking-out party. After what was described as "a nightmare march", improving weather allowed the tanks to take part in the attack on heavily-defended Yazagyo which was reached on 23rd October. On 26th, whilst forming-up south of Yazagyo for an attack on positions astride the Kanazo chaung, the column was mistakenly strafed by a hurribomber. B Troop, in the lead, took the worst casualties - seven killed, eight wounded.

Further actions in support of the KAR took the column to Bonnaing where it was soon found that the tanks' ability to give close support to the final stages of the infantry assault with their .50 MGs was invaluable. B Troop's task was to find and mark out the most suitable track, and assist the tanks by clearing road blocks, lifting mines and unditching. On more than one occasion they were able to incorporate the Scissors bridge in improvised chaung crossings using teak logs and corduroy. They accompanied a fighting patrol with 13 KAR to find out conditions ahead in the Indaingyi area and were involved in getting tanks forward in the difficult final advance in the Myittha Gorge. By this time they had suffered six more casualties.

The East African Div entered Kalewa on 2 December, opening the way for the massive bridging operation across the Chindwin (known as Grub bridge) carried out by 33 Corps Troops Engineers. Although the field companies were all Bengal units, HQRE was Bombay and the whole operation was commanded by Lt Col F Seymour-Williams who was able to recce the site on 5 December for a class 30 pontoon bridge 1153 feet long. Work started on 6 December and was finished on the 10th and a notable feature was the marshalling of all the bridging at Indaingale, 21 miles in rear, by 1st December, after a 310 mile road journey from Dimapur requiring two lifts over some of the worst road conditions in the world.

On 18 December Bellforce was paraded for inspection by GOC 11 EA Div and disbanded. B Troop's casualties had been one havildar and six sappers killed and fourteen wounded, nearly 50% for the column as a whole. Although short-handed, their work had been outstanding, and was marked by the award of an MC to Lt Adams whose leadership at the front had been an inspiration. By this time the division had pressed forward toward Pyingaing and Shwegyin, making a firm bridgehead some 8 by 4 miles. By now also, the rest of 401 Field Squadron had moved up from Imphal, via Nanhannwe, enabling them (less A Troop) to concentrate forward at Mutaik, on the Yeu road, at the end of the month.

Pursuit towards Tiddim

At the beginning of August 1944, 5 Ind Div, whose engineers included 20 Field Company (Maj P Hatch) and HQRE, both Bombay units, began its southward pursuit of the Japanese down the Tiddim road. 9 Ind Brigade, with whom 20 Company usually operated, had reached MS42, struggling in appalling conditions of mud and rain. The track, so laboriously created before the Japanese assault in February, was now severely flooded in the monsoon rain and the company was employed in cutting tracks into the hills and winching guns and tanks to support the infantry encircling operations.

By 23 August they had reached MS85 and by 14 September the Japanese rearguards had been forced back behind the raging torrent of the Manipur River

at MS126. Here the river was 110 yards wide, in a deep gorge, with a current running at 12 feet a second, and the Bengal field company involved in the first attempts to get a cable across to establish a flying ferry suffered grievous losses. Further attempts succeeded in establishing two FBE flying ferries on 19 September and a 2-pier class 9 FBE raft on the 21st. The river was rising, the current increasing to 17 feet a second, and a second accident brought the total number drowned to ten. Both field companies were by now involved and straining to increase the ferrying capacity and, despite another three foot rise in the water level, some rafts were coupled together to give deck space for mules, guns and vehicles. By the 28th three rafts were joined and succeeded in getting six tanks of 3 DG across - a highly hazardous venture. By 4 October a class 40 ferry was in operation and the major part of 9 and 161 Brigades together with a half squadron of 3 DG tanks had been taken across.

It was now clear that there would not be sufficient engineer resources to open two roads to the Chindwin. The Tamu-Kabaw valley route had clear priority so the Tiddim road behind the leading brigades was now abandoned and allowed to deteriorate. The Division forward of the Manipur river was put on air-supply by parachute basis, limited to 70 tons per day, with a reduced scale of transport, but including the half squadron of tanks.

The way forward now led to the infamous Chocolate Staircase where in seven miles the road climbed 3000 feet with 38 hairpin bends. Although not in the lead, 20 Company was fully stretched in cutting tracks up into the hills, in road repairs of all kinds, and in mine clearance. With no rearward evacuation possible, sapper assistance became increasingly necessary for movement of casualties and preparation of shelters, dropping zones and water points. A major requirement was to get the tanks up to deal with enemy bunkers; sometimes several days work of winching and bulldozing in cold mist and rain to move a single tank. Indeed, later on, a M3 Lee tank of 3 DG reached the superb vantage point of the summit of Kennedy Peak (8800 feet) after the last 2500 feet had been opened through virgin forest. The driver, Trooper Connolly, later wrote: "We started the advance with two troops each of six tanks. The engineers had hacked mountain goat tracks into roads passable in the dry season, but at least one tank dropped 2000 feet over the side. We finally got through to Kalemmyo with just three tanks."

Tiddim was taken on 16 October, after which Japanese resistance stiffened in the areas of Vital Corner and Kennedy Peak which were not clear until 3 November. Meanwhile, a suitable site for a light airstrip, 750 yards long at an altitude of 3000 feet, was found at Saizang, 6 miles south of Tiddim, and by 8 November the first proper casualty evacuation became possible. By this time command of the company had passed to Maj ET Abbott, Maj Hatch having been promoted CRE. In somewhat easier conditions, 9 Brigade led the advance by road, encountering road blocks and mines. The first patrol contact with 11 EA Div took place at Kalemmyo on 12 November. By the end of November another

airstrip had been prepared at Kalemmyo and the division prepared to fly out to India. Its few remaining vehicles, and the mules, marched back toward Tamu where the new all-weather road alignment was beginning to take shape. On 3 December, on his way out, Maj Abbott called in on 481 Company at Khampat, south of Tamu, to greet old friends and exchange news.

20 Indian Division

After their strenuous fighting in the Imphal battle, in August 1944 20 Div was back near Imphal for rest and recuperation. HQRE (Lt Col ARS Lucas) and 92 Field Company (Maj JH Clark) near Wangjing and 481 Field Company (Maj AC Lewis) at Waithou, alongside the Lake which provided excellent bridging training for units in the area. Leave parties returned during September and October and fresh equipment began to arrive, most notably the first wireless sets (four 22 sets per field company). In 92 Field Company Subedar Jagat Singh had replaced Sub Ramzan Khan, and in 481 Company Sub Abba Sable had replaced Sub Bachan Singh still suffering from the wound he had received earlier at Shenam whilst carrying out the series of patrols for which he was later awarded the MC. Both he and Sub Abba Sable had been jemadars together in 29 Field Company when it was first formed in 1941. November saw the first move forward toward the Chindwin in the wake of 11 East Africa Div's struggle down the Kabaw Valley toward Kalewa

92 Field Company

32 Brigade, augmented by the addition of 4/10 GR, was ordered to march on an all-pack basis to Mawlaik, cross the Chindwin and advance in a left-hook to Chingyaung to support 2 Div in the Shwebo - Oil Indaw area. Accordingly 92 Company left Wangjing on 27 November with 32 mules (plus two spare) and marched through the hills via Shuganu - Mombi - Minthami - Htinzin to Mawlaik which was free of Japs and described by 9/14 Punjab Regt as a "pre-war delightful township, green grass, pleasant bungalows (now wrecked by bombing), and the Chindwin river. A few Burmese had remained and had grim tales to tell of atrocities committed by the head of Kempei Tai whose headquarters had been in the town." Here Maj Clark carried out a recce on 1 December. He wrote (in *Sandes* Chapter 12) "We had only 13 outboard motors in our equipment, but two dozen Ranger boats were dropped to us by parachute. Downstream of Mawlaik the river ran in several channels, so a site was selected upstream where the river was 600 yards wide and clear of sandbanks. The current ran at 5 knots. Two rafts were improvised with empty oil drums and palm trees, each with several motors attached. Other motors were fixed to native craft, and a workshop was started to keep the motors repaired. On 2 December the 1st Northants established a bridgehead and pushed out patrols, and by 4 December the whole battalion was across and on its way into the hills east. The remainder of the Brigade was across by 7 December, and 92 Company followed on the 8th To get the mules across, each animal was led to the rear of a Ranger boat

containing two sappers and eight infantrymen. Its load and harness had already been dumped on a raft. The inflated boat was then paddled out from the bank at a steeply sloping place until the mule's head could be hauled up to the rear bulwark and held there securely so it could breathe freely. The swimming of the mule helped the boat forward, though skill was needed to steer the animal in the right direction."

In total, some 5000 men, 1500 animals, and 30 tons of stores were put across. Lt Webb and part of the PM platoon were left behind to clear up some of the rafting equipment, and the rest of the company marched for a week up the dried-out Pondaung Chaung, a deep vertical sided gorge where water supply was difficult, reaching Chingyaung and Pyingaing by the end of December. Here there was a brief pause before the next stage of operations south.

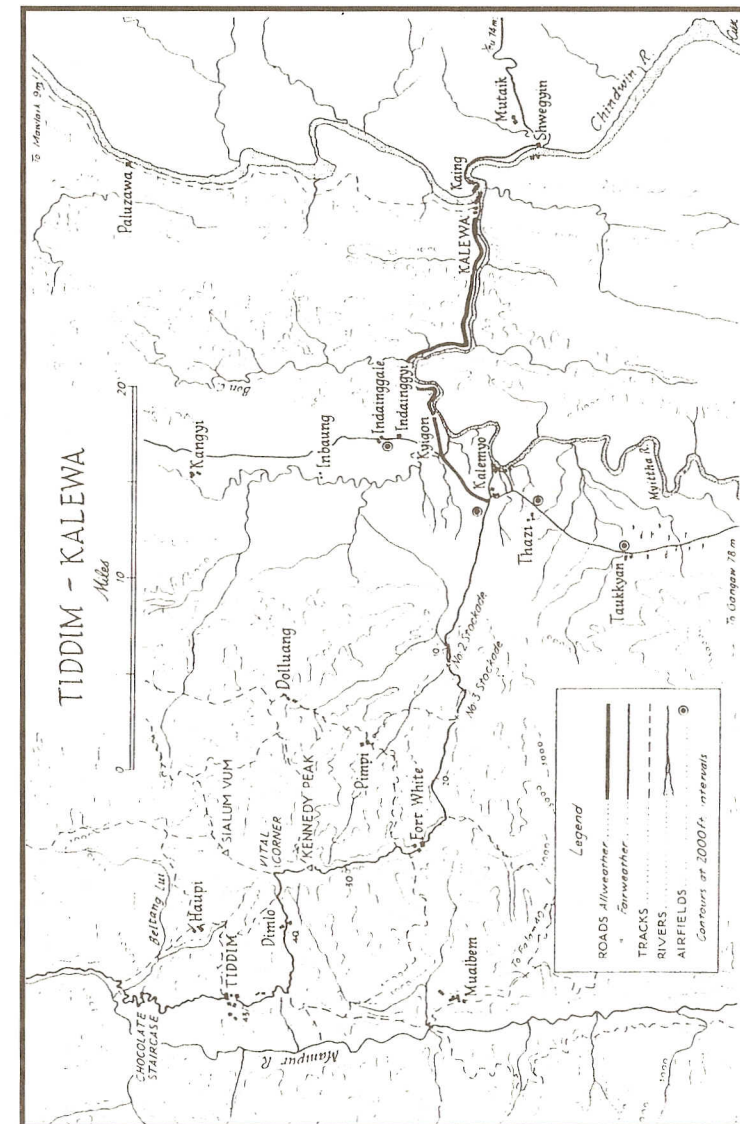
481 Field Company

Meanwhile in 481 Company, Maj Lewis had left on 8 November to instruct at Quetta and on 21 November orders were received to tidy-up the bridging equipment on the Waithou Lake and prepare to move. Additional transport was provided and the company moved during the night 22/23 November through Tamu to Khampat in the Kabaw valley, some 25 miles south. Here also was located Divisional HQ, with HQRE. Lt Prentice took the Mahratta platoon to join others working on the Minthami - Mawlaik track which was being rapidly upgraded to class 9 in the wake of 32 Brigade's recent passage, through teak forest which Lt Webb has described as "idyllic country". Using bulldozers and two elephants, he finished twelve class 12 bridges (totalling 600 feet) between 12 -19 December. The elephants were happy to work a 6 hour shift in the early part of the day provided the bulldozers were kept strictly out of earshot.

Maj Prichard returned from Quetta on 12 December to take over command, and by 20 December, with the bridge and bridgehead at Kalewa secure, the plans for the breakout across the Chindwin were revealed. Accordingly, the company moved on 22 December, crossed Grub bridge, and harboured on the far bank at Kalewa in readiness for their next task, down the Chindwin river itself.

19 Indian Division arrives

19 Ind Div arrived from its training base in India towards the end of 1944. 29 Field Company (Maj AK Dowse) was a Bombay unit, but all the rest of the divisional engineers were Madras including HQRE, although the CRE (Lt Col FM Hill) himself was a Bombay Sapper. The Company left Nasik area at the end of September, arriving at Dimapur by train on 14 October. An advance party, meanwhile, had been busy in the building of the divisional camp at MS116 on the Imphal - Dimapur road, where the main body arrived on 16 October. Lieut Cummings and CSM Stephen followed with the transport on 24th.



Cummings was admitted to hospital soon after this and Lt Francis was loaned from HQRE to take his place.

Whilst units were settling in, the division's future role became known, to spearhead an advance by 4 Corps across the Chindwin in the area to the north of 33 Corps. There were to be two approach routes, Route A in the north from Tamu-Thanan -Tonhe-haungdut, and Route B in the south from Tamu - Sittaung. Route A to be class 9 and Route B class 5. Events unfolded rapidly with recce parties under Maj Dowse and Lt Francis setting out on 5 November for Route B, and the company coming forward on 8 November to roadhead at Kyauksedi, some 16 miles beyond Tamu. HQRE and the other companies concentrated between Moreh and Tamu.

Reflecting the division's sense of dash and urgency, on 10 November a change of plan called for working parties from all units in the division to be put to work on Route B which was to be made jeepable in one week. This caused some embarrassment because the CRE and Maj Dowse were still out on reconnaissance of roads on the far side of the Chindwin and could not be contacted until they returned on 13 November. 29 Company with two D4s and infantry working parties started on the lead portion on 12 November, from MS16 to MS23, over the 2500 foot range of hills, which was finished to class 5 by 18 November. Two other field companies working ahead of them were able to start ferrying operations at Sittaung on 19 November and get one brigade across unopposed. In order to keep the maximum pressure on the retreating Japanese rearguards, it was now decided that the rest of the division would be switched to Route A with all possible urgency.

Once again 29 Company found themselves in the lead, moving up the long valley of the Yu River to Thanan where a considerable operation with working parties from all units of two brigades was organised to widen the jeep track to class 9 across the 3000ft hills to Tonhe. This was the track which, in February 1943, was so difficult that it all but defeated the mules of the outgoing Chindit columns, and over which the Japanese, a year later, dragged their own vehicles with the assistance of elephants. Now it was made good for the passage of the 3-tonners of the division's GPT company. 29 Field Company reached Tonhe on 29 November where they completed a light airstrip on 3 December, and reconnoitred for a crossing of the Chindwin some 10 miles south at Nanthanyit, near Thaungdut. Joined by the other field company, the approaches were prepared, and FBE and some Jap bridging collected, so that the War Diary reports "on the 8th December, the Division pouring across." Ferrying capacity was much increased by the arrival of the remarkable Ramped Cargo Lighter, 52ft long and shallow-draughted, which had been assembled on the Yu River by IWT personnel and floated to the Chindwin and driven upstream. 98 Brigade was across by 10 December and the company followed, heading east on the Leu road.

The 29 Company War Diary for the next 18 days shows the company moving 13 times and travelling 217 miles, supporting the hectic pace of 98 Brigade's advance east, and then south through the largely trackless country beyond the Zibya-Taungdaung range. Speed was the priority and by improvisation, diversion, or by any other means, the brigade transport (heaviest vehicle 2½ ton 6x6) was kept moving. Only 4-wheeled drive vehicles were allowed in the advance, so it was a great achievement by CSM Stephen to somehow bring along one of the Morris 4x2 compressor trucks which was repeatedly in use.

Banmauk was taken on 16 December, opening the way for patrols forward to Indaw to make contact with 36 Div (Royal Scots Fusiliers of 29 Independent Brigade) coming south from Katha. Pressing south, the company cleared some Jap mines at Letpanda, and prepared a light airstrip at Ngapyawdaing near Sabanatha which they reached on 31st December, about 40 miles north of Shwebo.

Bridging and Stores

Mention must be made of two Bombay units in the Corps area which played a less spectacular but important part in these events.

305 Corps Field Park Company (Maj WG Prow)

This was the veteran company which had been in various locations in the Imphal area since mid-1942. HQ 4 Corps and the corps troops engineers had withdrawn to India in August 1944, but the field park company remained and, because of its central position, found itself in the thick of all the stores movements and redeployments. There was continual large-scale collection by road from Dimapur to 11 ESD in Imphal and, later on, to 10 ESD in Palel. Bridging had to be supplied to 5 Div down the Tiddim road, and also to 11 East Africa Div forward of Tamu, and for 19 Div's arrival in theatre and subsequent advance to Sittaung. Redundant stores were collected from the Ukhrul road and also from 5 Div's field park dump on the Tiddim road. In addition, an officer and lighting set detachment had to be supplied for 4 Corps HQ back at Ranchi.

In October Capt Leischman was posted to command 309 Field Park Company (Madras) which had just joined 20 Div. Lt Beaton was promoted to take his place. November saw the company moving to a new location at Moreh, at the same time having to lend transport and help units of corps troops engineers moving back into Imphal and Tamu areas. More vehicles had to be collected from Dimapur and distributed, and Lt Toole attended a course at Chaklala on packing and moving stores by air, a business which was to become increasingly important in future operations.

The pace increased in December with Bailey bridging to be moved from Imphal, and FBE and outboard motors required at Nanthanyit. The company collected two 7½ ton plant transporters for its own use and on 30th moved to



Kalemyo with 3 FBE lorries, leaving rear-parties collecting up stores at Hleziak, Thanan, Nanthanyit and the old Corps dump at Moreh for concentrating in 12 ESD.

9 Bridge Platoon

After their busy time in the Imphal battle, in August 9 Bridge Platoon was under command 5 Div for operations down the Tiddim road where Capt Pilditch finally succumbed to fever and was evacuated to hospital. In September, Capt Anand took over and brought the unit back, first to Imphal, and then in October to Palel where it was attached to 10 ESD, collecting, sorting, and repairing bridging stores of all natures.

As an illustration of the lonely existence which this platoon experienced, the War Diary states "OC and VCO both in hospital. One havildar on a course, the other on leave. Only one naik left, in charge!"

In November and December the platoon remained working in 10 ESD.

36 Division Push on to the Shweli

Unlike the other divisions, in January 1945 36 Div was already over the Irrawaddy and heading south down the valley of the Shweli. There had been changes in 30 Field Company where Maj DS Wilson had arrived to take over from Maj Swain on the 16th, and Lt David Young had moved-up to replace Capt Parry Rocke as 2IC. He writes: "when the last of 26 Brigade and Div HQ were across without any accident, on 5 January 30 Company wound up the ferrying operation and took their remaining vehicles and stores across. As the last truck came the ramp, the brakes failed, the raft tipped and the 3-tonner went into the river. Eventually it was winched out, and happily Nk Dattu Powar, our invaluable motor mechanic had survived. The jungle had clearings in it from time to time and with the dry weather vehicles were able to get around more easily. The main tasks were road recces and repairs, water-points, and a new task of preparing landing strips for Dakotas, thus reducing the need for parachute drops. We levelled off the 'bunds' round each paddy field where we could get sufficient length. Usually these were pretty temporary affairs, and abandoned as we moved forward."

At the end of the month the division came up against the strongest enemy resistance so far, in the hills behind the Shweli and its junction with the Nammek Chaung at Myitson. A daylight crossing to the island one mile east of Myitson was attempted by 2 Buffs of 26 Brigade on 1st February. They were in Ranger boats crewed by the Madras field company and soon ran into heavier than expected opposition from MG fire in enfilade and from the opposite bank, causing very heavy casualties. The attempt had to be abandoned and the task of bringing back the wounded and remaining infantry from the far bank continued until the

next day, in most dangerous conditions, in which the sappers had shown great gallantry. Casualties amounted to 114 killed and wounded, with much of the equipment destroyed.

On 3rd February a recce was made for a fresh attempt by 26 Brigade, some miles downstream and sheltered from observation and harassing fire from the Myitson area. The intention was for the infantry, once across, to advance upstream to get a foothold into Myitson across the Nammek Chaung which was 200 yards wide but now known to be just fordable. 30 Company had already been practising rafting with the American M2 assault boats rafts brought up by 324 Company to Bahe, a further 6 miles down-river. With a platoon of the Madras field company under command, on 7th February they ferried 1/19 Hybads across at No 1 crossing, about 400 yards wide, and about 4 miles downstream. Lt Egan with the Sikhs swam more than 100 mules across behind M2 boats. Rafting of stores continued on the next day, but half the equipment was dismantled and brought up by road to add to that already assembled at another site about 2 miles nearer Myitson (No 2 crossing). Here, at 0430 on 9th February, the remainder of 26 Brigade (2/8 Punjab in the lead) started a 350 yard crossing to a sandbank on the far side. Lt Rau of 30 Company remembers: "The crossing started smoothly enough and we had put across a battalion when a Jap FOO in a tree started doing his stuff as soon as day broke. Every time a raft pushed off, artillery fire came down and the water spouts rose all round the rafts but, strangely, there was only one direct hit during the day. As the river was about 400 yards wide, each raft attracted at least half a dozen shells each crossing."

The sappers who were building and manning the M2 assault boat rafts had to work in the open, where they began to take heavy casualties, particularly the Mahratta platoon whose Jemadar, Shankar Khadam, was killed. They carried on most courageously until nightfall, by which time 2000 men together with 50 tons of stores, 2 jeeps and 5 trucks had been taken across, and 4 landing stages built. The company had suffered 13 killed or wounded. The brigade, however, had established two battalions across the Nammek Chaung in a very narrow bridgehead.

Similar conditions on the beaches continued during the next few days but, against stiff resistance, 26 Brigade was able to expand the bridgehead whilst parts of 72 Brigade crossed to protect the flanks. Ferrying had to be stopped for a time on 15th when an enemy MMG was established on the far bank covering the beaches. Lt Rau was caught up in a battle in 9 R. Sussex area and cut off, but was later able, with Hav Mohd Ramzan, to bring back several boatloads of wounded despite shelling on both banks. Elements of 72 Brigade were brought back to the near bank on 16th, and moved upstream to the area of the original Buffs' crossing in order to carry out harassing operations and pin down Japanese defenders in the Myitson bridgehead. Attention now shifted to another site (No 3 crossing) slightly downstream of Myitson itself where another ferry had been started to take supplies to 72 Brigade facing the Chaung. This ferry became the

vital link with 10 Glosters when they were cut off in the Jap counter attack of 17th. Two rafts were brought upstream from No 2 crossing and by the 21st some 15cwts and jeeps and trailers had been taken across. With 29 Brigade starting to approach from the west, Japanese resistance began to crumble and both 26 and 72 Brigades were poised to cross into the bridgehead area and secure Myitson and the site of the peacetime ferry. (Here the engineer battalion started work on a remarkable class 12 timber trestle and piled bridge, 540 feet long, which took 23 company/ days to complete.)

The rafting was handed over to the Madras field company on the 22nd and 30 Company moved across to build a jetty on the far bank. By 24th they were encamped near HQ 72 Brigade and working to improve the track out of Myitson running alongside the Nammek Chaung. For his coolness and example during the critical days at No 2 crossing Lt McNaughton was awarded the MC.

The company now was working with only one platoon jemadar. The PM jemadar had been wounded before the Katha crossing. With Shankar Khadam now killed, it is to the great credit of the remaining VCOs and senior NCOs that the jawans stuck to their tasks so staunchly.

324 Field Park Company

During this period 324 Field Park Company had been busy at the Katha crossing which had become the main divisional supply route, making up more rafts out of the Japanese pontoons to take heavier loads. A 5-pier raft was tried on 20th January, and longer ones on 24th but disaster struck on 25th when a 5-pier raft loaded with a D7 angledozer capsized. Lt RN Kini and Sprs Lal Singh and Shingaru Singh were drowned. At this time Capt Parry Rocke had taken over command from Maj McKay.

As a result of urgent requests made after the unsuccessful Shweli crossing on the 1st February, considerable numbers of Ranger boats and assault craft arrived by air. Lt Col Easton has written "never in the history of the advance of the division had sapper eyes been so gladdened by such an abundance of equipment. The heavens almost rained assault craft." The stores platoon was responsible for receiving and sorting this consignment at its advance base at Bahe, and in meeting a big call for the manufacture of such items as paddles for Ranger boats, pole charges, notice boards and timber for corduroy.

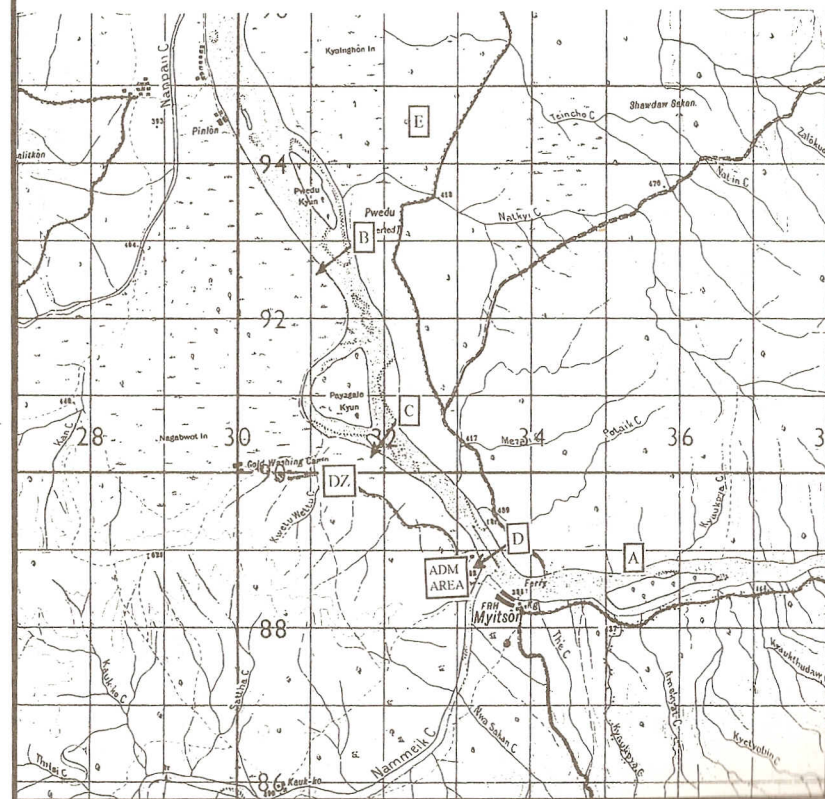
A field park company is always saddled with a host of odd jobs but none more unexpected than the call to fight a fire which broke out in Divisional HQ area on 4th February. The field platoon was back at Katha assisting with the ferrying, but it was also responsible later in the month for bringing forward the material for the larger rafts by road to the 72 Brigade crossing at Myitson.

THE SHWELI CROSSINGS

LEGEND

- A 1 Feb First attempt by 2 Buffs. Unsuccessful
- B 7 Feb No 1 crossing. 400 yards. 1/19 Hybads, unobserved
- C 9 Feb No 2 crossing. 350 yards to sandbank. Remainder of 26 Bde followed by elements of 72 Bde
- D 15 Feb No 3 crossing to support 72 Bde and bridgehead troops. 400 yards
- E Site of 30 Field Company camp from 2 - 23 Feb

(Scale. Map squares are 1000 yards)



19 Indian Division on the Irrawaddy

Although facing increasingly stiff opposition, 19 Div by January 1945 was driving south parallel to and west of, the Irrawaddy, approaching the key communications centre of Shwebo with its five airfields. It was clear the Japanese intended to make their stand behind, rather than in front of, the river and the Division's task was to make a crossing to threaten Mandalay from the north and divert the enemy's attention away from the main 4 Corps assault which was secretly preparing in the Gangaw valley on the Army's right. With aircraft operating at their maximum range, the limited air-supply situation now dictated a pause for regrouping and preparation.

29 Field Company had cleared a light airstrip at Kongyi, level with Shwebo, on 5th January. Shwebo was finally taken on 10th, opening the road from Yeu and making it possible for two platoons (one FBE, one Assault) of 852 Bridge Company to arrive on 12th. The divisional plan was made known on 14th January, for a main crossing at Kyaukmyaung by 64 Brigade supported by 29 Company, and a diversionary crossing by 98 Brigade at Thabeikkyin 20 miles north where patrols had already been across on 9th January. 29 Company immediately sent one platoon to Shwebo to practise and train with the FBE on the lake there, whilst the rest of the company settled in to a camp at MS 16 on the Shwebo - Kyaukmyaung road and started secretly preparing approaches to the river banks.

The main crossing started at Yedaw, one mile upstream of Kyaukmyaung, on the night of 15/16 January when 5/10 Baluch were silently paddled across the 600 yard gap in FBE boats by 29 Company's Mahratta platoon. The Baluch dug in undetected and the boats were brought back and hidden. Similar operations on the next two nights saw the main part of 64 Brigade across and pushing south to enlarge the lodgement before the enemy fully woke up to the threat and began to counter-attack. The beachhead was in a restricted valley with a steeply sloping beach (about 1 in 4) and was far from ideal so, as soon as there was sufficient room on the far side, the ferry was moved downstream on the 21st to Kyaukmyaung, working across to Ngapyin. Here, with the help of one of the Madras companies, some daylight crossings were attempted to get some mules and essential vehicles across, and the first elements of 62 Brigade.

Ngapyin itself was hemmed in by high ground, and lacked a good landing beach and hinterland, but it was to be another three weeks before sufficient ground could be secured to enable the ferry to be moved downstream to more open terrain round Singu, 4 miles south. Meanwhile, at Ngapyin, the Japanese reacted violently, bringing together the greatest concentration of enemy artillery experienced anywhere in the campaign, and transferring strong reinforcements from the NCAC front where the loss of two Chinese divisions had seriously weakened General Stilwell's advance. In addition, they launched a counter-thrust at Kabwet, 10 miles upstream of Kyaukmyaung, establishing a dangerous bridgehead not overcome until 1st February after a bitter 15-day battle involving

1/11 Sikhs and 2 R.Berks of 98 Brigade. In this fighting, there was urgent need of armour support to evict the enemy from the high ground giving them artillery observation so, when some Bailey pontoon equipment arrived at Shwebo on 22nd January, a platoon of 29 Company moved-in to start training with a class 40/60 raft on the lake. The remainder continued with the FBE ferry.

At Shwebo, some DUKWs and elements of 254 Tank Brigade had arrived, and from 24th to 29th the company worked by night to prepare approaches, a launching site and bankseats adjacent to the Kyaukmyaung terminals. The Bailey raft was brought forward and assembled on the river bank during the night 30/31st and concealed. Its first use was the following night when 8 Lee tanks of 150 RAC, with engines running, were successfully taken across, towed by a DUKW. Maj Dowse was on the far bank and Capt JD Hay supervised the near bank, the best turn-round time being 28 minutes. One sapper was killed by shell splinters but the raft was undamaged. Before daylight it was camouflaged and hidden on the far bank (where the enemy never discovered it). Another eight Lee tanks were taken over on 6th February, and the following night 16 Stuarts of 7 Cav (two to a raft) together with their Valentine scissors bridge, D8 tractor, Mack recovery truck and nine carriers also crossed. Turn-round time 33 minutes.

By 8th February conditions had eased and it was possible to start using the raft in daylight. It was modified to class 40/70 batwing configuration and on 15th the ferry site was at last moved down to Shwedeik, working across a 1300 yard crossing to Kule, directly into the Singu bridgehead. A company from the airfield engineers took a turn in manning the raft from 16th until the 21st, during which time Lt Cumming's Mahrattas were dug-in at Kule where the bankseats needed constant adjustment and maintenance. Two platoons had gone forward in the 62 Bde area where the fighting was intense, to assist with mine clearance and helping tanks forward, and it was here on 18th February that Lt WJK King was killed whilst with a recce patrol of 2 Welch to Ywathit.

By this time the build up at the Singu bridgehead had been considerably expanded. The big raft was in use by day and by night, and progressively carried all the heavy loads for the whole division and some of the Corps tail. The next 10 days saw the company working in 62 Brigade area in the struggle to gain the high ground. Faced by massive air-strikes and artillery bombardment the Japanese resistance gradually slackened, but it was not until the end of the month that the Division could start to break out. Lt Cummings has written "the last time 29 Company saw the raft the wear in the panels and pins gave it a pronounced curve, but it had served us well and we had become quite fond of it."

In these actions, apart from Lt King, the company had lost one LNK and four sappers killed, and a similar number wounded.

401 Field Squadron

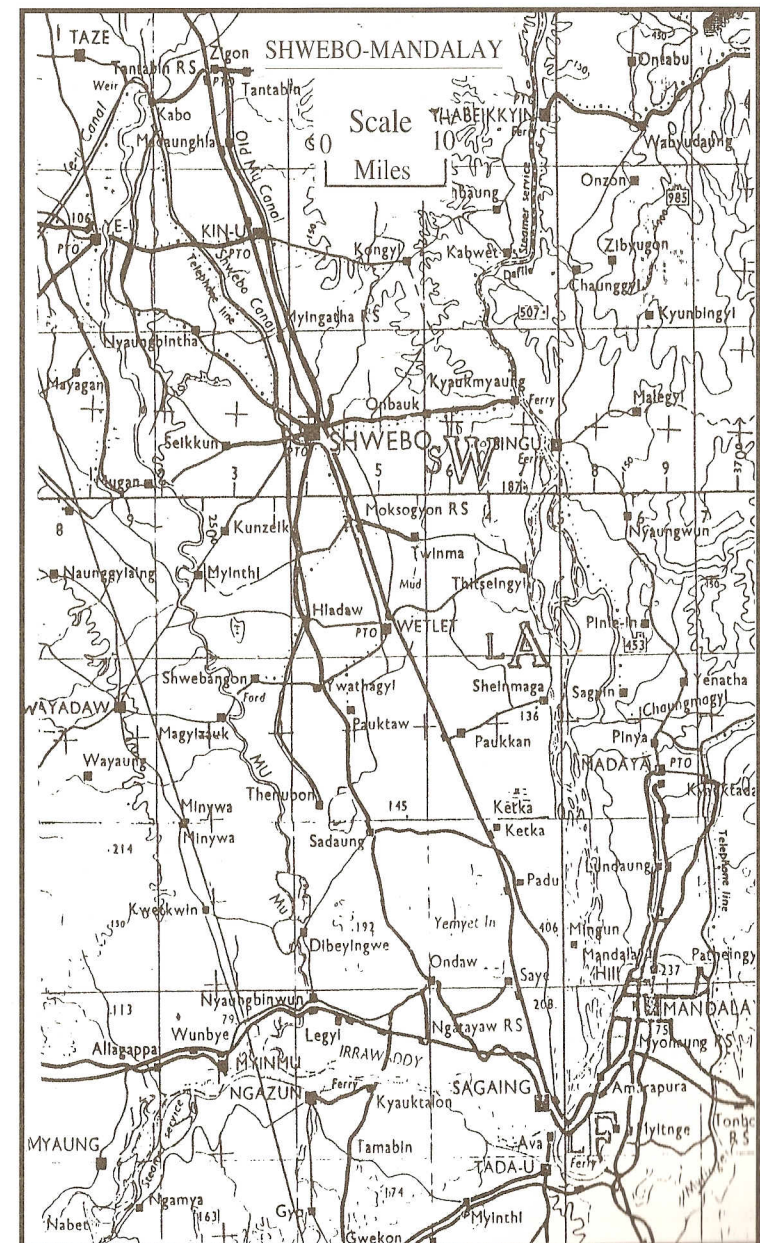
401 Squadron was under command of 254 Tank Brigade which, in late December was beginning to arrive at Kalewa after its long march from Imphal. Although the Stuart tanks of 7 Cav were across, the Lee tanks of 3 DG and 150 RAC were too heavy for Grub Bridge and had to be ferried on Bailey pontoon rafts downstream to Shwegyin. This, coupled with a shortage of transporters, made progress slow. The brigade's axis was the main Pyingyaing -Yeu road toward Shwebo, supporting 2 Div, but heavy rain had closed the road for a period on 6th January. B Troop (Mahratta) was working with 7 Cav, while C Troop (PM) was under command of the leading 3 DG squadron. On 29 December, some 14 miles SE of Pyingaing, Nk Mohd Din was in the lead vehicle when they came under heavy fire from the far side of chaung over which was a bridge. He posted his detachment under cover while he went forward alone to examine a possible diversion route on the left. Although under LMG and mortar fire, he checked that the route was passable, and free of mines. As a result of his report, the tanks were able to advance and the crossing was secured. In the citation for his award, it is pleasing to see "strongly recommended for the immediate award of the Military Medal" in the handwriting of Maj Gen Nicholson himself, the Commander of 2 Div.

The leading tanks of 3 DG reached the outskirts of Shwebo on 9 January after an 80 mile advance in which many chaungs had to be bridged to take the heavier loads and the Mu river was unfordable for tanks. It was not until 21st January that Squadron HQ reached Shwebo, together with advanced HQ of the Armoured Brigade. The OC, Maj P Burrell, had been evacuated sick on 3 January so Capt Harley took over, but with only HQ Troop left under direct command. C Troop had gone south with 3 DG to the 2 Div area, while B Troop were with 7 Cav in support of 19 Div. They were very short-handed because, apart from their previous casualties, 20 were on leave. The Stuarts, whose crossing on 7th February is described above, were C Squadron 7 Cav, their old companions from Bellforce days, whom they now accompanied into the Singu bridgehead.

C Troop meanwhile were engaged in mine clearance with 3 DG in operations against Ondaw, Kyaukse and Ywathitgyi close to the Irrawaddy. They had been with the leading squadron of 3 DG continually since the advance from the Chindwin, with Lt Ryden usually in the leading dingo or carrier. At Shwebo, under fire, he cleared mines from the bridge over the moat, enabling tanks to take the town that night. He was recommended for a MC which was gazetted in November, by which time he had won an immediate MC for a further act of gallantry at Yenangaung in April. The November gazette, therefore, shows him receiving a Bar to the MC.

20 Indian Division's advance to the Irrawaddy

The 33 Corps task of breaking into the open country round Shwebo and



threatening Mandalay meant that the main part of the Corps was committed to the Grub bridge crossing at Kalewa and the close hilly country to the east. The one recognisable road through Shwegyin and Pyingaing was required for 2 Div and corps traffic so that 20 Div, with its right-flanking role following the Chindwin, was forced by the terrain to make a double crossing of the river to gain the open country and a suitable track at Kyauklega, some 50 miles south. Although roads were scarce, it was realised that the Chindwin itself offered considerable possibilities as a route south.

Maukkadaw

On 23 December 481 Field Company took over a set of FBE at Kalewa and loaded up the rafts with Jeeps, trestles, and small stores, and attached each raft to the side of a DUKW. Lt Webb, with part of the PM Platoon of 92 Field Company joined this flotilla with two FBE rafts powered by propulsion units which he had brought down from Mawlaik. Company personnel were embarked and this imposing fleet set off on 25th December under command of the 2IC for Maukkadaw, 75 miles downstream. Maj Prichard's recce party had already gone ahead with Lt Prentice and some Burmese guides in a Bridge Company motor boat, towing an assault boat with outboard engine. At Maukkadaw they were very much in the division's van but found two good crossing sites 14 miles apart and a track on the west bank connecting them.

The passage of the main party, however, had taken three days, much longer than planned owing to lack of information about navigation channels, and continual grounding on sandbanks where, with their deeper draught, the DUKWs were the first to get stuck. Despite this, ferrying started at Maukkadaw on 29th December on schedule, and next day two FBE rafts moved down to the second crossing at Anauktaw. At both sites the far bank exits were across wide stretches of sandy river bed. By this time a considerable mass of infantry, animals, and transport had arrived at Maukkadaw from all directions, all eager to push on, but with little traffic control so that sappers had to carry out beachmaster duties. (This was a valuable lesson which was put to good effect a month later on the Irrawaddy.) 100 Brigade were across and clear at Kuaklega on 2nd January, and by 14th all divisional transport had crossed, with the ferries being operated by the Madras field company.

Budalin

At the end of December 32 Brigade, on a pack basis and with two platoons of 92 Company, was able to push south across the Yeu road into the open country beyond the Maukkadaw Chaung. 4/10 GR was left in a strong blocking position at Pyingaing where they fought a highly successful ambush on Japanese forces opposing the leading brigade of 2 Div advancing from Kalewa. In front of 32 Brigade lay the important communications centre of Budalin which by 1st January was reported to be strongly held. The leading infantry closed-in on 4th but the town was not taken until the 9th, after a hard-fought brigade assault.

At this time 481 Company were busy assisting 100 Brigade in their advance from the right, on the route Kuaklega - Winmana - Maungdaung. Platoons were working with battalion columns to keep them moving across the many chaungs and roadblocks. Parties of retreating Japanese stragglers were everywhere and on 6th January Capt KDG Phillips (Sikh platoon), patrolling with a 2 Border column to find a bypass route to the west of Budalin ran into an ambush and was killed at Kyauk-O. Near this place, at Thayogon, on 9th 92 Company (Lt Linton) started work on a much needed Dakota landing strip. In their recent march they had found a 4½ ton roller which was now put to work together with two D4 dozers from the field park company, enabling the first planes to land on 18th. The strip was handed over to the airfield engineers on 21st. The company transport arrived from the Kuaklega ferries on 12th January, closely followed by Lt Webb with the PM platoon. On 15th, HQRE arrived at Budalin, having staged at Winmana in their move from Kalewa. Maj JH Neill had joined them from Kirkee in the middle of the previous month.

Monywa

By this time 32 Brigade had moved on to Monywa, the chief river-port on the Chindwin where 92 Company were clearing approaches from 14-16 January. After a major 6-day battle, with airstrikes and help from another brigade, the town was taken on 22nd. Among a lot of useful materials, the company found 150 serviceable wooden Jap pontoons. Using 10 of them, they quickly made a class 9 raft on which a battery of mountain artillery was ferried to the far bank.

The capture of Monywa and Alon, to the north, opened the way for a mass of pontoon rafting and craft being brought down from Kalewa by corps troops engineers and IWT. 92 Company built a 70 ft class 40 Mk 5 pontoon raft at Alon which they brought down to Monywa on 1st February, where it was used to pass a squadron of 11 Cav armoured cars across. This move was linked to the building of a dummy bridge of Jap wooden pontoons and steel rails across the Chindwin as a deception measure.

The brigade's real intentions lay further east where Maj Clark, on the 4th, moved to Myaung to recce for a brigade crossing of the Irrawaddy. The company moved to a site at MS9 on the Chaung-U to Allagappa road the next day, and started a programme of watermanship practice, under Lt Linton, at Monywa with platoons of 1 Northants. On the 9th, the PM platoon collected the Jap pontoon raft from Alon and brought it in trucks to MS9. HQRE had moved up to Monywa from Budalin on 27th January.

Myinmu

Following the capture of Budalin, 100 Brigade swung left toward the Mu river, which was the divisional boundary with 2 Div, and made for the town of Myinmu on the bank of the Irrawaddy. Passing through Budalin on 16th January,

481 Company opened the track over the hills to Ayadaw, then south to Minyma, Kwetkwin and Kundaw, some 7 miles back from the river. The 10-mile hill section from Thapan to Wadawma required extra work to permit the passage of the Corps allotment of four massive 7.2in howitzers and their tractors, 10½ft wide and with a 50ft turning radius, which were notorious for damaging any Bailey decking they encountered.

Parties of Jap stragglers were streaming back towards the Irrawaddy where strongpoints and stay-behind parties had been established along the near bank but the arrival of 11 Cav's armoured cars greatly helped the speed of the advance. 4/10 GR took Myinmu after a hard fight and on 30th January 2 Border cleared unexpectedly heavy opposition at Satpangon. By the end of January 481 Company was harboured, together with 14/13 FFRif and 2 Border, at Kundaw where there was a useful-sized lake to start preparation and training for an imminent brigade crossing. A Japanese penetration to the east of Myinmu on 4th February caused a delay and the company moved back to a more central location behind Satpangon.

The divisional plan was for a main crossing in the Myinmu area by 100 Brigade, left, and a secondary crossing some 9 miles downstream by 32 Brigade, right. Although there was a valuable breathing space caused by the precarious air-supply situation at this time, the serious difficulties arising from the paucity of sapper equipment for the assault became daily more apparent. Against an allocation for engineer stores of 315 tons, the CE 33 Corps had only received 84 tons. The resources for the whole division amounted only to

canvas assault boats Mk2 12, Mk3 12

Ranger boats 40

outboard engines 22hp 17, 9.8hp 12.

All these were the worse for wear. These figures are taken from the HQRE and field company diaries and are roughly half those that are quoted in the *Official History* by Kirby and the *RE Corps History*, where the numbers probably given are 'on charge' rather than 'usable'. There were 9 DUKWs and some FBE but these were deemed too precious to be risked in the assault. The Chief Engineer had signalled 19 Div on 2nd February, calling for the return of all Assault Equipment no longer required but, not surprisingly, very little materialised.

Improvisation

Fortunately, 481 Company had earlier found a string of small Jap steel boats lying near the river at Myinmu, all hastily, but imperfectly, demolished. Also in the town a useful quantity of sawn timber came to light, so a small workshop was quickly set-up in the Police compound under CSM Webb who was later joined by the WO commanding the Brigade HQ LAD with a gas-welding set. Here they produced decking to span two repaired boats, with provision for mounting a 22hp outboard motor from a transom across the stern. Each raft had a pair of wooden trackways which could be hooked at either end of the decking to facilitate loading and unloading, in the expectation of carrying a

jeep and trailer. Five such rafts were produced and sent up to the lake at Kundaw where they proved surprisingly successful and became known as 'Fradgecraft', taking the place of the equipment that should have been available, ie Stormboats.

Also, by good fortune, 92 Company had been able to make good use of the Jap wooden pontoons for the 10-pier raft, powered by two propulsion units previously mentioned, and three steel pontoons, each powered by two 22hp outboard motors, which made useful towing vessels. In the early days of February they were able to practise and gain experience in the open water of the Chindwin at Monywa.

These do-it-yourself measures went some way to offset the equipment deficiencies, and were to have an influence on the crossing operations to be described later.

The Bridge Platoons

The beginning of 1945 saw both 9 and 15 (Bombay) Bridge Platoons working in 10 ESD at Palel, at a time when a massive re-organisation was beginning to take shape to deal with the considerable problem of moving bridging equipment, particularly Bailey, from railhead at Dimapur forward to support both Corps across the Chindwin. The two platoons moved out of Palel on 18th January in borrowed tipper lorries and arrived at Kalewa on 21st. Here they came under command of 461 Army Troops Engineers.

15 Bridge Platoon

15 Bridge Platoon (Capt JN Mullan) took over the operation and maintenance of Grub bridge, and then took part in the Bailey pontoon rafting operation for heavy loads such as tanks and plant from Kalewa to Shwegyin, as previously described and mentioned in the war diary as "a very interesting job". On 1st February Grub bridge had to be opened to allow the passage of a IWT "Firefly" and on the 2nd the bridge was handed over to an East African Bridge Platoon. Meanwhile, Capt Mullan, with 24 drivers, had departed for Dimapur to collect more bridging vehicles.

The rest of February was spent on the rafting operation which, by now, had extended toward Alon and Monywa, embracing a large number of IWT craft, DUKWs, and rafts of all natures. In March, with bridgeheads over the Irrawaddy having been established in both 33 and 4 Corps areas, and with air-supply severely restricted, the Chindwin was built-up as a main supply route. Capt Mullan was still away at Dimapur but on 14th March the subedar moved the unit down to Alon, where it joined 462 Army Troops (Bridging) to become a Bailey Raft Platoon. Vehicles arrived soon after and the end of March saw the platoon training in its new role.

9 Bridge Platoon

Meanwhile 9 Bridge Platoon (Capt Anand) had spent the end of January and February at Kalewa collecting and sorting bridging from sites where it could be freed. Large quantities were arriving by road, for forwarding in the direction of Shwebo for 33 Corps, and down the Gangaw valley for 4 Corps. The platoon also operated a water point.

On 4th March they built and manned five class 40 Bailey rafts loaded with Sherman tanks, destined for Alon. Four of the rafts had two 9-8 hp OBMs each, while the fifth was towed by a motor-boat but they were all hopelessly underpowered. One raft became firmly stuck on the first day. The motor-boat broke down on the second and one of the pontoons was holed by a submerged log. By this time the convoy had only reached Mingin. There was further trouble in difficult shallows at Thindaw where markers had shifted or were washed away. Four rafts finally fetched up at Monywa on the 13th where the tanks were unloaded on the west bank, destined for 4 Corps. The sappers were congratulated by CE 14th Army and came back to Kalewa on the 21st in returning IWT craft. They reappeared at Alon on 26th to become a standard Bailey Bridge Platoon.

It is interesting to note that the history of 19 Ind Div shows 9 Bombay Bridge Platoon as having at one time been under command, but no dates are shown, nor is there any mention of the occasion in the war diary. It is not likely that the platoon acted as a FBE platoon for the Chindwin crossings in November-December 1944, or on the Irrawaddy at Kyaukmyaung on 12th January 1945. It is more probable that the occasion refers to bridging operations on the Mawchi road later on in May and June, as described in the next chapter.

The Bridge Companies

To provide for the needs of the campaign in 1945, and to coordinate all bridging movements, a force of three Bridge Companies was created in March, known as 625 Army Troops Bridging under the overall command of Lt Col MH Briggs at 14th Army HQ, a Bombay sapper and one-time OC of 305 Field Park Company. One company was allotted to each of the three Corps, 4, 15, and 33. Two of the companies came from the Lahore Group in India, but the third was created in the field by incorporating various platoons already working and available. It was this third company which 9 and 15 Platoons joined, as described above, but their further story relates to events after March 1945 (see Chapter 20).

The 4 Corps Advance

The beginning of 1945 saw the unfolding of the great master-stroke of the campaign - the secret concentration and advance of 4 Corps down the Gangaw valley on the Army's right flank, aimed at a crossing of the Irrawaddy with an

armoured thrust to seize the Japanese base at Meiktila. The engineers chiefly concerned, from 7 and 17 Indian Divs and 4 Corps Troops Engineers, were all either Bengal or Madras with the single exception of 305 Corps Field Park whose story we now take up.

The company was newly arrived in January at Kalemoyo. Two of its D4s were working on the Bailey Bridge approaches at Hypaungzeik over the Nam Win and, as usual, the company was manning a water-point and running the lighting set back at Corps HQ. On the 9th they had to provide vehicles to assist one of the corps field companies to move forward, and at long last, the stores rear party caught up with them from Moreh.

In the wake of the rapid Corps advance, the stores platoon now moved 50 miles south to set up a dump on the newly-established airstrip at Kan which was air-head for the Forward Airfield Maintenance Organisation (FAMO). Lt Toole remembers: "The route down the Gangaw Valley was no more than a very narrow track joining several villages together. After such heavy use, it was necessary to realign and regrade much of it. A number of timber bridges had to be upgraded or replaced. Much of this work had already been pushed through in a hurry." The rest of the company joined them there on the 14th. Their transporter and tractor was used to move some heavy plant for the forward airfield engineers, and once again their trucks were needed to help two of the corps field companies forward, despite being short-handed on account of the MT guard back at Moreh still not having been relieved.

At Kan they were busy making water-sprinkler trucks for the airfield engineers, strengthening trailers, making brackets for outboard motors, overhauling Petters engines, and making timber dogs. The traffic on the roads was enormous, some 6000 vehicles including tanks, transporters, bridge company trucks, all competing for priority. All supply was by air.

At the end of January the field troop was working on the road at Tilin, 85 miles further south, where a second air-head was being prepared. CRE 4 CTE was forward of Gangaw, and the leading troops of 7 Ind Div were across the hilly section and had taken Pauk, a further 50 miles ahead. On 5th February a company reconnaissance party arrived in Pauk to lay out the lighting set and set up a water point, and on the 9th the main body moved into Sinthe, another 10 miles further on, after having been held up by traffic control in order to let 4 Corps HQ and some 17 Div units through. Sinthe was to be a vital air-head for the imminent river crossing, and by 13th (the eve of the crossing) the company was knitted into the operational plan with a wireless set on CRE 7 Div's net, and another on CAGRE's. The crossing itself does not form part of this chapter, but has been fully described in the RE Journal by Colonel A Murray.

The Airfield Engineers arrive

Although 4 Corps operations down the Gangaw valley were now given clear priority, there were never sufficient road-making resources, either men or materials, to permit a supply system based on road transport. All supply would have to be by air. Furthermore, if ground forces were to continue to enjoy close air-support, a number of new airfields would be required in the wake of the advance. Ideally, after every 50 miles. The task of achieving all this fell to 457 Forward Airfield Engineers (Lt Col Butting), an all-Bombay group which at the end of 1944 had been training back in India in the Cocanada area. The units concerned were 402 and 363 Field Companies, and 24 Engineer Battalion accompanied by an extremely important ME platoon of Indian Engineers equipped with graders, scrapers, sheeps' foot rollers, as well as dozers. They were now ordered forward to concentrate in the Indaingyi - Kalemmyo area by 1st January 1945, a road-rail-river journey of some 2,000 miles!

402 Company was unusual in that it had undergone special training at Chaklala to produce an airborne party designed to land ahead to mark out a proposed site, and do the preliminary clearance. The party was led by Lt T McDonald, with Hav Fateh Khan, McDonald's doughty batman Joti Khamwar, and two other Mahrattas. Maj McClaurin and Lt Faulds also completed parachute training, together with Lt Cooper from HQRE and Lt Turnbull from 363 Company. Unfortunately Turnbull was injured in training and 363 Company had no further opportunity for airborne training before their move. The other important part of the training was the specialised dismantling and packing of stores and equipment onto sledges for loading into Hadrian gliders.

The broad doctrine in training was for the advance party, once arrived, to mark out and clear a site within 4 - 6 hours, capable of receiving gliders. Ideally, 750 yards long. In the gliders, or by road, would come D4 angledozers to lengthen the strip to 1200 yards in 24 hours to receive DC3s containing petrol and ammunition for Spitfire refuelling. Subsequent finishing-off to be done by the engineer battalion, so that the field company was freed to move forward to the next task.

Kan

After arriving at Kalemmyo, 402 Company was the first to move south in borrowed transport to start work on the first new airfield at Kan on 11th January. Maj McLaurin had returned to Kirkee, and Capt CF McDougall moved up from 21C to take over. Lt Faulds took his place as 21C. On the journey from Chaklala, he had been in charge of the wooden sledges which he managed to bring as far as Parbatipur, where they proved to be too large for the narrow-gauge wagons. He managed to modify a few and got them as far as Dimapur where they all had to be abandoned since there was neither transport nor time to catch-up with the company far ahead.

At Kan Lt Bennett with the Mahrattas had the job of building the control-tower. "The corner posts were palm trees and, in the absence of company stores, these had to be hauled upright by my jeep. At the top, 25ft up, we built a 15ft square platform on which we erected a thatched OP. The roof apex was 38ft above the ground and it was disconcerting, when fixing the thatch, that a lone Spitfire came in low, below where we were working, and much too close for comfort."

By 16th January the first strip was ready for Spitfires and two days later 363 Company (Maj C Baillie), after a long road journey from Moreh, arrived to join them on the second strip which was steadily enlarged during the next ten days. Kan by this time was a hive of activity; the corps field park had set up its stores dump, 17 Ind Div had started to concentrate, and HQ 457 Forward Airfield Engineers had arrived. Lt Col HM Millar from 24 Engineer Battalion reported-in to Lt Col Utting on 15th January to discuss plans.

Tilin

Gangaw had fallen to the Lushai Brigade on 10th January and another airhead was now urgently needed at Tilin, 45 miles further south. 363 Company handed over their work at Kan on the 22nd and arrived at Tilin on the 25th. With some heavy plant and assistance from a survey party from 402 Company, they prepared the 1200 yard long transport strip in time for fifteen C47 planes carrying stores to land on 2nd February.

This was the dry season and the constant traffic on the roads created an ankle-deep layer of fine dust, rising in a choking red cloud. Aircraft, landing and taking off, stirred up a similar cloud, visible from afar and threatening to reveal the extent of the operation to enemy eyes. The only solution was to lay the dust at frequent intervals with water-sprinklers. Every available truck or trailer which could be fitted with a tank and sprinkler bar was pressed into service. Provision of water points with separate traffic circuits and proper filling arrangements assumed a special importance, which explains the frequent mentions of this task in the War Diaries.

Sinthe

Meanwhile Pauk, 50 miles further on, and over the steep hilly section, had been taken on 28th January. 10 miles ahead there was a good flat open site beside the Yaw Chaung at Sinthe where 24 Engineer Battalion, pushing-on in borrowed transport, began to arrive on 31st. They started work on the 1500 yard by 50 yard fighter strip next day when they were joined by 402 Field Company, most of whom had to march the final stages from Tilin because their vehicles were carrying stores, and, with one-way-only road traffic, there was no possibility of 'ferrying'. Progress was rapid and a second, parallel, strip was started on the 6th, the same day that 363 Company arrived from Tilin. This also was the day

of the visit of the Deputy SEAC Supremo, General Sir Oliver Leese, who met some of the officers and gave a morale-boosting address.

Once again, Lt Bennett's Mahrattas built the control tower. The second strip was finished on 9th February, and then a start was made on extending the first by another 500 yards. The corps field park arrived to handle what was becoming a massive air-lift of stores and equipment, such as Sommerfeld track, needed for the imminent river crossing. 500 tons were handled during one day. By the 12th, 363 Company had taken over all the work, making it possible for 402 Company and most of the engineer battalion to move forward.

Myitche

The capture of the X-roads at Kanhla 8 miles short of Pakokku on the 11th February gave fresh urgency to the preparations for the crossing by 7 Ind Div, scheduled to take place at Nyaungu on the night of 13/14 February. The strip at Myitche was started by 402 Company on 14th February and steadily enlarged throughout the rest of the month. It was an essential link in the chain of support towards Meiktila, but the vital work of preparing for the crossing itself, from 13th to 23rd of February, had depended on the success of the airhead at Sinthe. The Commander AGRE, Colonel A Murray, has written: "Luckily for us, when we reached the river, a reserve of equipment could be flown in to an airhead we had established 35 miles from its banks, and we faced the crossing with a reasonable array of pontoons, motor boats, outboard motors, folding boats, assault boats and DUKWs. The construction of this airhead was an outstanding piece of work by 457 Forward Airfield Engineers, RBS&M commanded by Lt Col B Utting."

36 Divison across the Shweli

The Last Lap

At the beginning of March, with 19 Ind Div already fighting in the outskirts of Mandalay, the Japanese in front of 36 Div were forced to pull back, using delaying tactics. 30 Field Company, together with the Field Platoon of 324 Field Park company, advanced with 72 Brigade towards Mongmit. Capt David Young remembers "this area was hilly without many trees, and where roads had to be repaired there was plenty of stone. The Sabagyi and Nammeik chaungs were mostly dry, and bridging was hardly necessary." The Japanese, however, had planted a considerable number of improvised mines in the road and it was here that Lt Rau had a lucky escape from an accidental explosion a few yards away in which his very valued Havildar, Mohd Ramzan, was killed. He had been officiating as platoon jemadar; Hav Ghulam Sarwar took his place.

Mongmit was reached on 9th March, and the company was able to take a few days rest. Lt Rau has written "glorious carefree days without the inevitable patrols

and constant shelling. I took my platoon for a road walk and run in PT kit with only a few men armed with Sten guns." At the same time Capt Boydell remembers "Mongmit was infested by flies. All personnel had to remain indoors a whole day while planes of the USAAF sprayed the town with DDT."

Here the ME Platoon of the field park company found themselves working alongside American Airfield Engineers in the completion of a Dakota strip. However, it was here that the US air force had earlier dropped a large number of butterfly anti-personnel mines which, being difficult to see and highly sensitive to vibration, posed a lethal threat, particularly in camp or harbour areas. With no method of disarming, the company had to develop a technique of blowing them in situ with hand-placed pole charges.

The advance continued toward Mogok with its famous ruby mines, where the company made a useful job of restoring the town's water-supply, and were visited by General Sir Oliver Leese on his tour of the area. Here the first serious Japanese demolitions were encountered. From the 25th to 29th March, 30 Company worked on repairs to the motor road running from Mogok to Thabeikkyin, 60 miles west on the Irrawaddy in the old 19 Ind Div area.

Mandalay - Maymyo - Meiktila

Mandalay had fallen to 19 Div on 20th March and by 1st April events were moving rapidly. Lt Rau with most of No 1 Platoon set off by MT convoy on the route Mogok to Singu, and thence south via Madaya to Mandalay. The next day Lt Egan with 3 Platoon flew in to Mandalay North airstrip. The rest of the company followed on 4th April, and then moved south on road and bridge maintenance tasks toward Meiktila, which they reached on 8th May.

The field park company, however had remained in camp a few miles east of Mogok, and now found themselves nearly 100 miles behind. Some of the vehicles sent to bring them forward had been involved in an accident so that a havildar and six sappers had to be left behind to guard their loads. Capt Boydell brought the remainder through to the Gokteik Gorge where they stayed a week, and where the last vehicles, and the guard, caught them up. The main body of the division, meanwhile, had joined-up with the American Mars force at Kyaukme on 30th March, and was able to cover the route Kyaukme - Hsumhsai - Wetwin - Maymyo without serious resistance. Divisional HQ (with HQRE) was established at Maymyo on 7th April. 324 Field Park Company joined them there, and immediately started work on the water-supply, swimming bath, and camp structures, and repairing the steam crane on the railway. They moved through Mandalay, staging briefly at Langwa, approximately 45 miles south, and finally reached Meiktila on 25th April.

It had long been decided that the American Air component was to be withdrawn by 1st May which meant that the division could no longer be

maintained in the forward area and would have to be flown out to India. By the middle of May advance parties of 30 Field Company and 324 Field Park Company were back in Visapur, and HQRE installed at Dighi. A fitting tribute to round off the story of the sapper achievement in this remarkable campaign is contained in a laconic war diary entry for 29th March "CRE takes a prisoner"!

19 Indian Division take Mandalay

At the beginning of March 1945 the Japanese hold on the prestigious river-port and centre of Mandalay was being threatened by the successful Irrawaddy crossings by 2 Div and 20 Ind Div to the west. North of the town, the Japanese facing 19 Div were forced on the defensive but were by no means defeated. All their positions were stubbornly held to the very last man so that, in addition to massive air-strikes, the division found the close support of the tanks increasingly essential. With the main route south through Yenatha and Madaya heavily defended, the advance depended on outflanking operations on the right, through broken and unfavourable country bordering the Irrawaddy, including the unnamed river loop from Shwedon to Udein, bordering Sambo Island, and the marshes west of Madaya.

The break-out from Singu started on 1st March with an attack down the main road designed to draw in the Japanese reserves. 29 Field Company was committed to operations on the right intended to achieve surprise. On 3rd March they ferried troops of 62 Brigade across a channel to secure an island at Sagyetkhon. The next 4 days saw them supporting 98 Brigade, filling in numerous chaungs, making improvised track repairs with corduroy, and clearing mines. The main obstacle was the Magyi Chaung which the company bridged with class 9 FBE at Sagyin on 6th, before pushing on through difficult and marshy country to the motor road at Pinya, reached on the 7th, 2 miles short of Madaya. Here No 1 Platoon was detached to go east with 62 Brigade on its 40 mile march through the mountains and forests to Maymyo, which was taken on 11th March.

B Troop of 401 Field Squadron had been with the Stuart tanks of 7 Cav in the advance and had contrived a number of improvised chaung-crossings. On more than one occasion they had covered a wide gap with a Scissors bridge resting on a timber crib on the far side, and a corduroy causeway leading to it on the near side. The Japs were using bombs and mines in the roadways which, although usually visible, had nevertheless to be disarmed and cleared away.

Meanwhile, a leading column with a troop of 150 RAC Lee tanks and the Stuarts of C Sqn 7 Cav (known as Stiletto Force) had bypassed Madaya and reached the northern outskirts of Mandalay on 8th March, and the savage 12-day battle to clear the town and take Fort Dufferin continued until 20th. 29 Company had been deployed on the road from Madaya to Taungbyon which was being badly cut up by the tanks and needed much attention, but, after the capture of Mandalay Hill, one platoon moved on to the racecourse to prepare a light

airstrip which was finished on 14th. Both platoons were then busy making scaling ladders in case the walls of the Fort (over 25 feet high) had to be assaulted in the old way, but fortunately they were never required

The Fort was entered on 20th March and the company was able to move into the town and reach the old Sapper & Miner lines the next day. On 22nd they joined the rest of the divisional engineers which were concentrated in Fort Dufferin itself, where considerable repairs to buildings, drainage and other services were urgently needed.

On 27th March the company joined 98 Brigade in Maymyo for a few days rest and recuperation, but they were back in Fort Dufferin again on the 30th before moving out to Ava. On 1st April 19 Ind Div passed into Army reserve which marks a suitable point at which to end this part of the story. The capture of Mandalay had been an internationally proclaimed triumph. Good accounts have subsequently been published by Lt Col EW Sandes and the writers John Masters and John Hill.

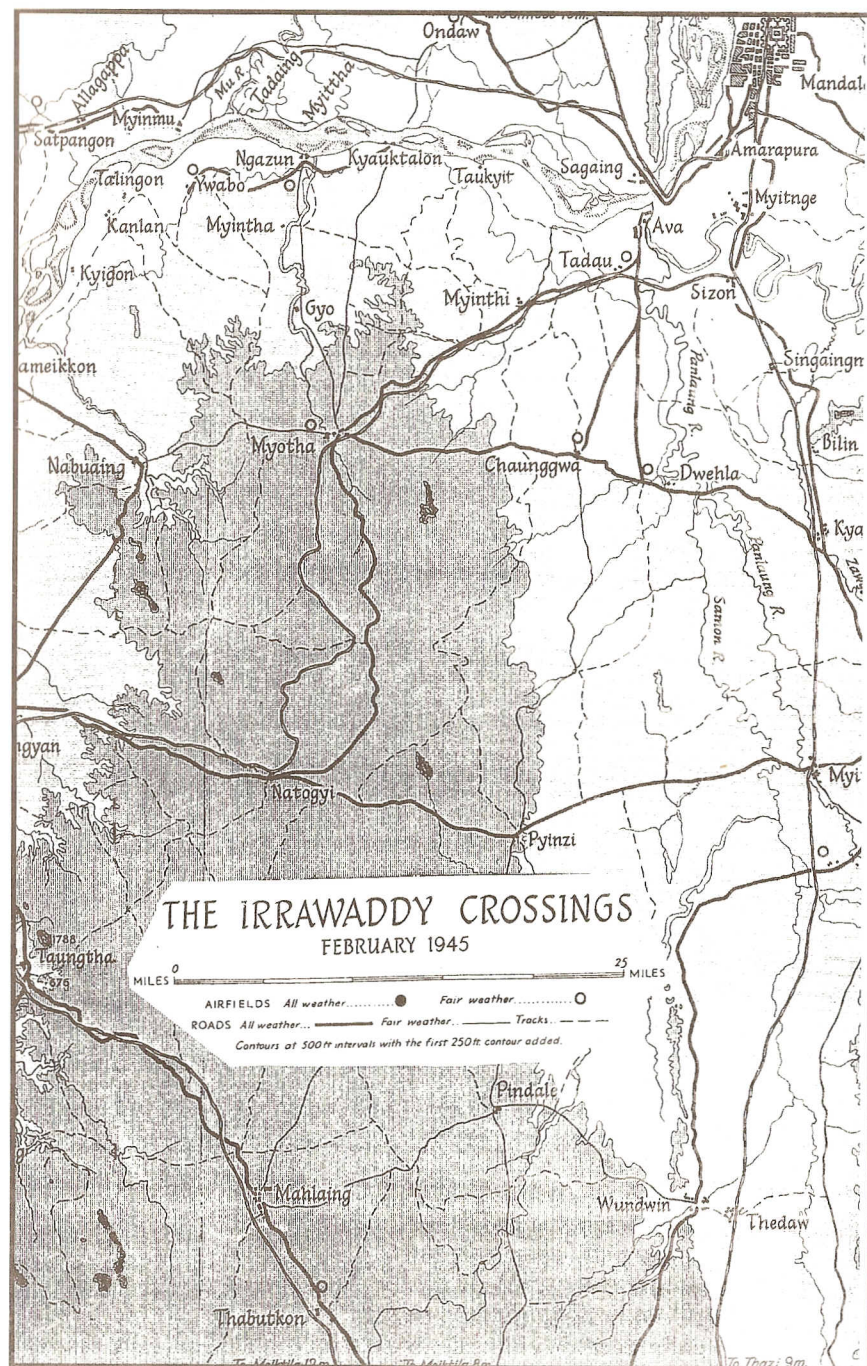
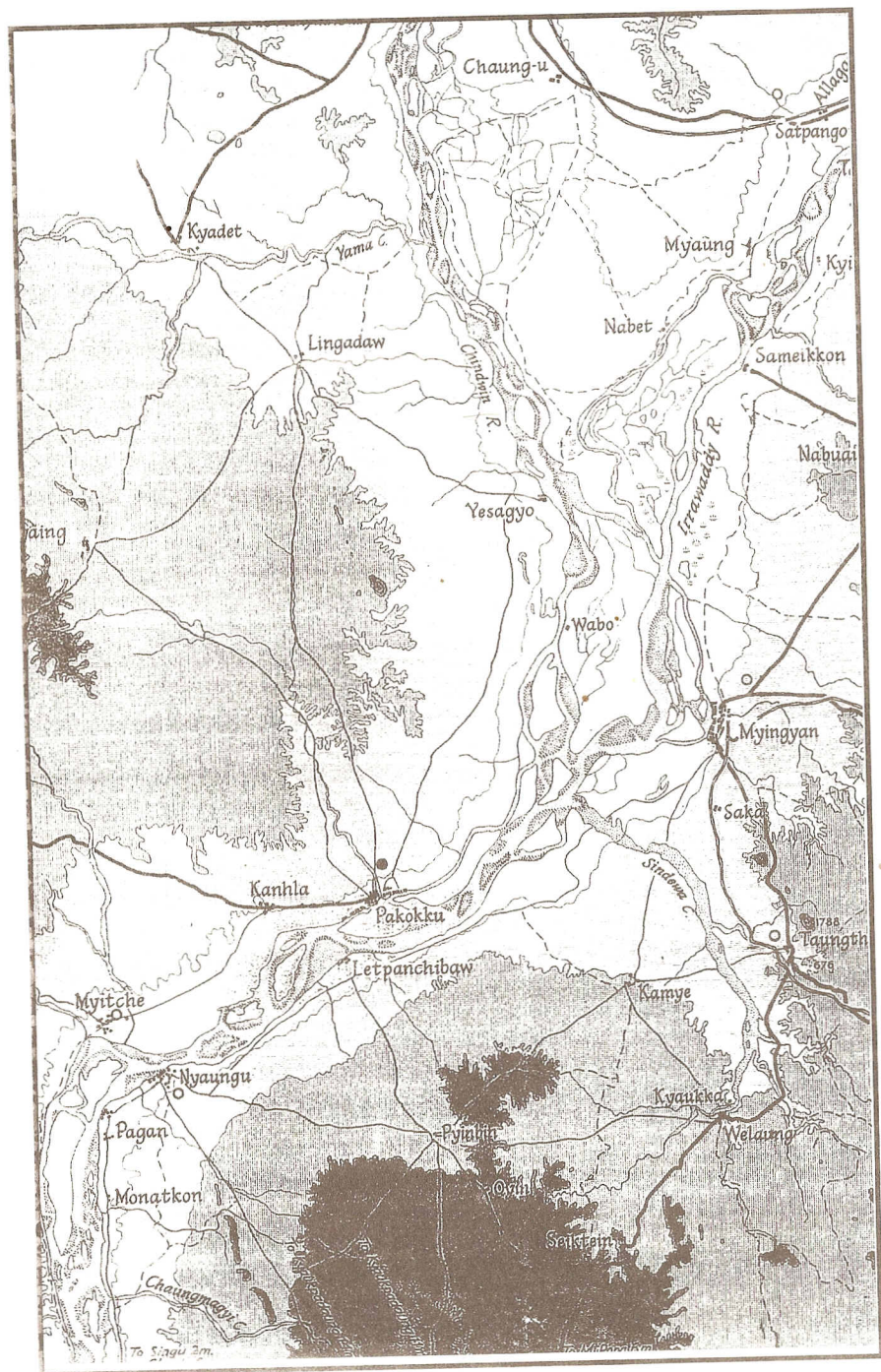
20 Indian Division cross the Irrawaddy

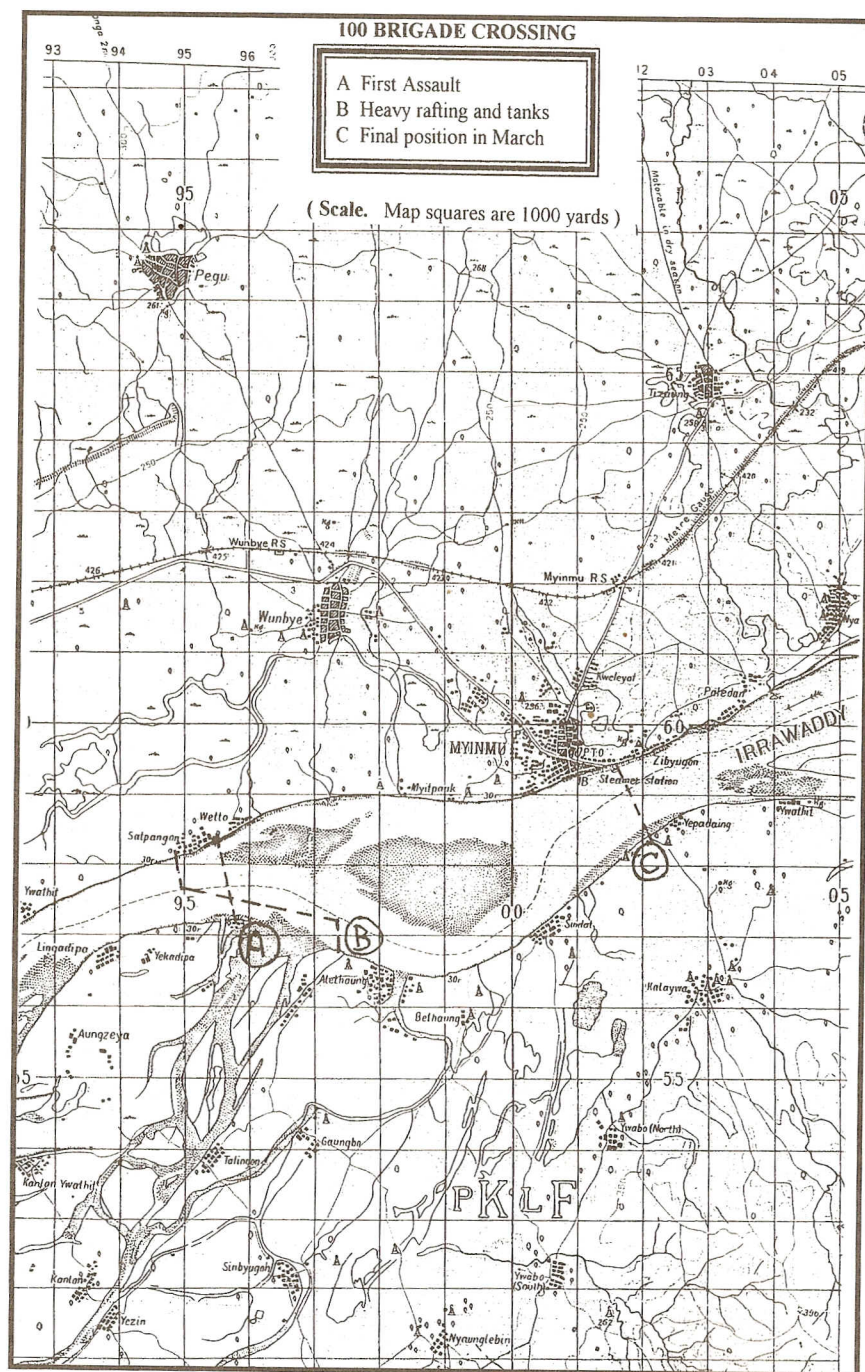
With 19 Div locked in its battle in the Singu bridgehead, a crossing by 20 Div was urgently required to draw-in enemy reserves and keep the Japanese attention focussed on Mandalay and away from the 4 Corps preparations in the Pakokku area. A main crossing was therefore planned in 100 Brigade area, to be carried out by 2 Border crossing in two flights, and followed-up by 14/13 FFRif Maj Prichard (481 Field Company) conducted a brigade demonstration on 7th February to show how the equipment was to be marshalled and carried forward, and how the assaulting platoons were to embark. In the days that followed both battalions practised their roles as far as was possible on the still waters of Kundaw tank, but in the interests of security there was a total ban on any movement or ground preparation near the river-bank. HQRE moved into Allagappa on the eve of the operation.

Mention must be made of the invaluable work of the swimmers of the Special Boat Section detachment who suddenly arrived in a 3 ton lorry with a petrol-cooker and an assortment of goggles and boards, and camped near Brigade HQ. They nightly explored the river, listening and watching, and bringing back information about sandbanks and beaches. On the night of the crossing their navigation lamps, placed on the sandbank and far shore, were a reassuring sight in the darkness.

The 100 Brigade Plan

The detailed plan was for two companies of 2 Border to form the first flight. Each company was to be embarked in a pair of 'snakes' towed behind a Mk2 assault boat fitted with a 9.8hp outboard motor. Each 'snake' consisted of a





string of five Ranger boats, each paddled by five infantrymen and one sapper. The sappers were to bring the boats back for the second flight which had its own allotment of three Mk 3 assault boat rafts powered by 22hp motors, and one smaller Ranger boat raft for company HQ. These second-flight rafts were deemed too noisy for the earlier 'silent' flight. These somewhat unsatisfactory arrangements used up all the available assault equipment. No role was foreseen for the Fradecraft which were to be held in reserve.

The operation took place on the night 12/13 February at a site slightly upstream of Satpangon where the river was 1400 yards wide, and where the trees gave cover to a track leading steeply down to a small beach. Earlier, in the late afternoon, there had been the cheering spectacle of a massive strike by two squadrons of Liberators on Japanese gun areas some two miles inland on the far side. Although carrying-forward started at 2000, there were delays and things on the beach had not gone well. The river level had risen, a strong wind was blowing downstream, and the beach fell away into deep water at the water's edge, hindering shore parties in their efforts to push the boats off. H hour was put back to 2345 but the snakes were underpowered and unable to make adequate headway. The major part of the first flight was swept downstream. In addition, the aircraft scheduled to overfly the river to mask the sound of the engines arrived in the wrong place, some 10 miles upstream and surprise had been lost.

The second flight was launched at 0030, but by 0130 only a small force, numbered in platoons, was across, far from secure, and progress was slow. Sporadic small-arms fire was now arriving on the beach and, with all the assault equipment committed, the success of the operation seemed far from assured. At this point Maj Prichard broke wireless silence to call up the three Fradecraft which had been lying about a mile back in reserve, each loaded on a 2½ ton truck. The three vehicles arrived at the top of the beach at 0145 where, due to good organising by Hav Maj Abdul Haq, the boats were unloaded, carried down to the beach and assembled in time for the first to get away at 0215; by 0230 all three were in operation, together with some of the Mk 3 assault boat rafts.

Progress now became rapid. The beachmaster arrangements worked well and Fradecraft were making 2½ trips an hour, loaded with a platoon plus extras such as mortars and ammunition. By 0430 2 Border were across together with some MMGs from 9 Jats, gunner OP parties, and their own first-flight platoons which had been retrieved from downstream. 14/13 FFRif followed immediately and were across by daylight at 0630, accompanied by some jeeps for mortars and signals detachments. Their patrols were soon in contact with well dug-in enemy MMG posts. Congestion in the bridgehead now dictated a pause in ferrying, but at 0700, with the main enemy counter-attack not having developed, the opportunity was taken of calling 4/10 GR forward to occupy the centre of the bridgehead between 2 Border (left) and 14/13 FFRif (right). During daylight of 13th February the demands on ferrying were easily met. Attention shifted to the site downstream where angle-dozer had started at first light to

cut a ramp down to the water's edge for the Madras field company to build a FBE landing stage. They were assisted by a field company from the airfield engineers so that, by nightfall, two Class 9 FBE rafts had crossed to the far side with trestles and Sommerfeld track for the beach-exits. The brigade now was digging-in on a frontage of approximately 4000 yards, to a depth of 2000 yards. For his cool handling of the night's events, Maj Prichard was awarded an immediate MC.

32 Brigade

The site chosen for the 32 Brigade crossing was nearly opposite the village of Kyigon, where there was a wide, open sandy beach on the home bank, and a small beach and cliff on the far side. The timings were the same as for 100 Brigade but 92 Company had great difficulty during the night of 11/12th February getting the trailers carrying the boats and pontoons into position through the soft sand. At 0800 on the 12th, Maj Clark had to call for help from a 100-man infantry working party with a jeep while the sappers, who had been struggling all night, had a brief rest before the coming night's work. Matters were not helped when 2 platoon was ambushed at 2000 on their way back to camp, losing a truck and 5 men wounded.

At 2230 the wind had got up and the idea of a 'silent' crossing was abandoned. The three steel pontoon towing vessels were launched and each one coupled-up to 10 assault or ranger boats arranged in a double string. These three, in charge of Lt Linton, Balston and Jem Budh Singh, and carrying the first flight of 1 Northants, got away at H hour (2300) but experienced difficulties with the engines, and only Budh Singh was able to make a second trip. Three companies of Northants were now across in a very narrow lodgement, but more ferrying in daylight came under accurate shellfire. Lt Balston very pluckily went to the rescue of Jem Budh Singh's tow drifting helplessly downstream with engine failure, but, despite a smoke screen having been put down, the whole party suffered casualties from small-arms fire before they could reach a sheltered bank. Balston was shot through the arm.

Daylight ferrying was suspended and, because some of the first flight boats had overturned, arrangements were made for future tows to have only six boats, and for each boat to carry a smaller number of infantry. By dawn on 14th, the Northants were largely complete, with supporting weapons and a jeep, and Lt Webb had made a crossing with the wooden pontoon raft, despite some trouble with leaking planking. The following night, 14/15th, two companies and Tac HQ of 9/14 Punjab were ferried across, together with a section of 6pdr ATK guns. Two FBE rafts were in use. Their last company prepared to cross on the night 15/16th but a Japanese attack had infiltrated along the far beach, and caught one of their platoons with MMG and LMG fire whilst they were landing. A furious fight ensued before the position was finally restored by dawn on the 16th. The Punjab had suffered severe casualties, but the Japanese had left 28 dead on the beach together with most of their weapons. Before this happened,

three jeeps and trailers and 11 mules had been rafted across, and unloaded.

The following days were marked with heavy and accurate shellfire which made conditions on the beaches most hazardous. The company had to work in the open, repairing and replacing boats and setting up alternative landing sites, and it was during this time that Jem Bhagwan Sakpal, Maj Clark, and 3 others were wounded and evacuated. On the far bank the enemy mounted a very heavy attack on the 17th, during which a ration raft was hit and sunk on the near shore before it could push off. Neither battalion was able to make progress inland on account of well dug-in enemy positions concealed in the long grass. Shelling reached a peak on 19th February but it was not until 5th March that 9/14 Punjab were finally able to link up with 3/8 GR who had cut their way down to Kanlan, on the far side, and vacate their trenches. Their War Record states: "The battalion will always remember the fine work of 92 Field Company, who, under heavy and accurate shelling, never failed to bring across supplies or to evacuate wounded. A Jap Officer's sword, taken on the beaches, was presented to them as a mark of the battalion's appreciation of their splendid work, and the award of the MC to Maj Clark, their OC was hailed by all with great satisfaction." The sword was presented on the beaches to Lt Webb and now hangs with a commemorative plaque in the mess anteroom at Kirkee.

The Main Crossing

As expected, the Japanese attacked ferociously on the night of 13/14 February, signalling the start of 14 day's savage and continuous battle. 481 Field Company was responsible for the ferrying, mostly by day; at first using the two FBE rafts backed-up by the Fradecraft for light loads. On the morning of 15th, Japanese aircraft made what was probably their last sortie of the war and caught some of the craft in midstream, killing Sprs Puran and Sariah Singh and wounding 11 others. DUKWs were used for towing, and a D4 angledozer taken across. The river-level fluctuated daily, necessitating frequent adjustments to the landing stages.

By 16th February the heavy rafting site on the near bank had been sufficiently enlarged to take Bailey equipment. The company built a 5-pier raft (again towed by DUKW) which took across the first of the Stuart tanks of 7 Cav. The FBE ferry was still in use alongside. The next few days saw the bridgehead sufficiently enlarged to take the rest of the squadron of Stuarts, and the raft was modified to a 6-pier 'batwing' configuration. Each day saw more elements of 32 and 80 Brigades taken across and, by 25th February, the first of the Lee tanks of 150 RAC had crossed and taken part in the battles for Sindat (upstream) and Talingon (downstream), a frontage of some 8½ miles by 2½ miles deep.

At the beginning of March both ferries were moved upstream to Myinmu where there was proper access and a passable road out to Kalaywa on the far side. By the 7th March the company had one platoon under command of 100

Brigade while the remainder tidied up the equipment left at Satpangon. Fresh Bailey was delivered on 13th, replacing the FBE, after which the company moved across the river to Kalaywa.

The Break Out

By 10th March the Divisional breakout into the open plain was under way. In 100 Brigade a strong mobile force was assembled called Barcol (after its commander, Lt Col Barlow of 7 Cav) consisting of:-

- 7 Cav less one squadron, Stuart tanks
- 11 Cav, armoured cars
- Squadron 150 RAC, Lee tanks
- B Company 3/4 Bombay Grenadiers
- 18 Field Regiment less one battery, Priests
- Battalion 4/10 GR
- OC party (Capt Harley) and C Troop (Lt Ryden) 401 Field Squadron
- OC party (Maj Prichard) and 2 Platoon (Lt Prentice) 481 Field Company

This column set out on 18th March clearing and dominating a large area to the south-east, first to Pyinzi and Pindale, and then cutting-in behind the Japanese retreating south from Mandalay toward Meiktila. The administrative centre of Wundwin was seized on 21st March and by 24th the sappers had cleared a strip large enough for use by C46 aircraft. The column then turned north, playing havoc with enemy installations on both sides of the railway until joining up with 32 and 80 Brigades near the main Japanese supply centre at Kyaukse, which fell on 31st. 481 Company now moved forward and regrouped near Wundwin.

Field Marshal Slim has written "The break-out by 20th Div was a spectacular achievement which only a magnificent division, magnificently led, could have staged after weeks of the heaviest defensive fighting. In three weeks the division had swept clear of the enemy an area 45 miles by 40 and was across the Rangoon - Mandalay railway on a 50 mile stretch. The Japanese had left two thousand dead and fifty guns behind them."

These events have an added significance for Bombay Sappers in that they constitute the five-week struggle which the RBS&M are proud to commemorate in the Battle Honour "*Myinmu Bridge Head*".

The 4 Corps strike to Meiktila

The main 4 Corps strike toward the Japanese centre at Meiktila opened at Nyaungu, near Pagan, on the night 13/14th February with a crossing of the Irrawaddy by 7 Ind Div to secure a firm bridgehead, followed by the huge rafting operation, starting on 16th, to pass 17 Ind Div and 255 Tank Brigade into concentration areas on the far bank. Ferrying reached a peak on 19th when 1000

vehicles were taken across in a single day, so that the break-out from Nyaungu could start on 21st. After a spectacular advance, and the capture of the airfield at Thabutkon, the tanks reached Meiktila on 25th February but it was not until 4th March, after ferocious fighting, that 17 Div had a foothold in the town and on the main airstrip. The desperate, and in some places, suicidal Japanese counter-attacks were not finally subdued until the end of the month. The Japanese had also penetrated toward Taungtha and blocked the road. They reinforced their positions and it was some weeks before road traffic into Meiktila could be resumed.

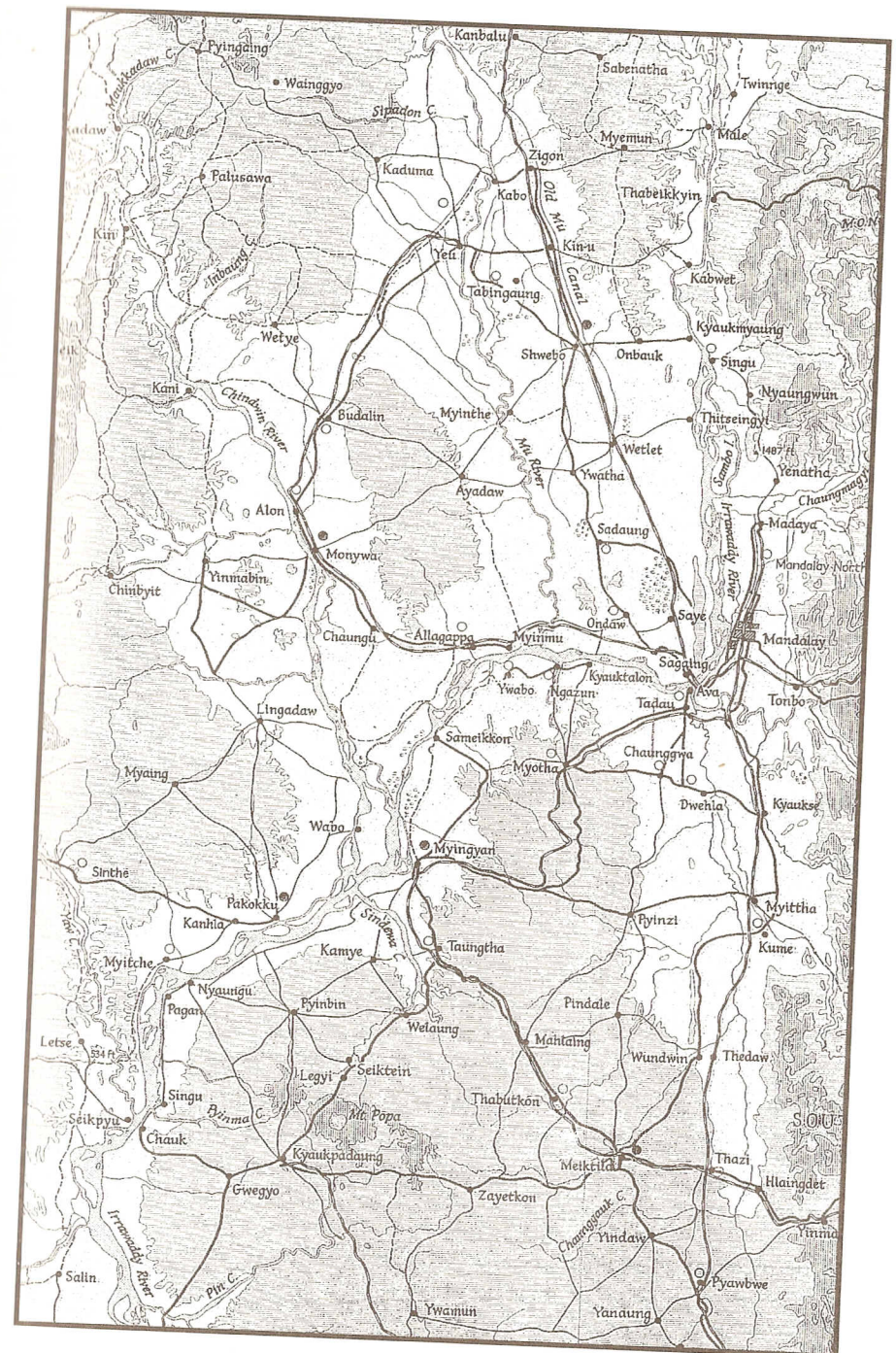
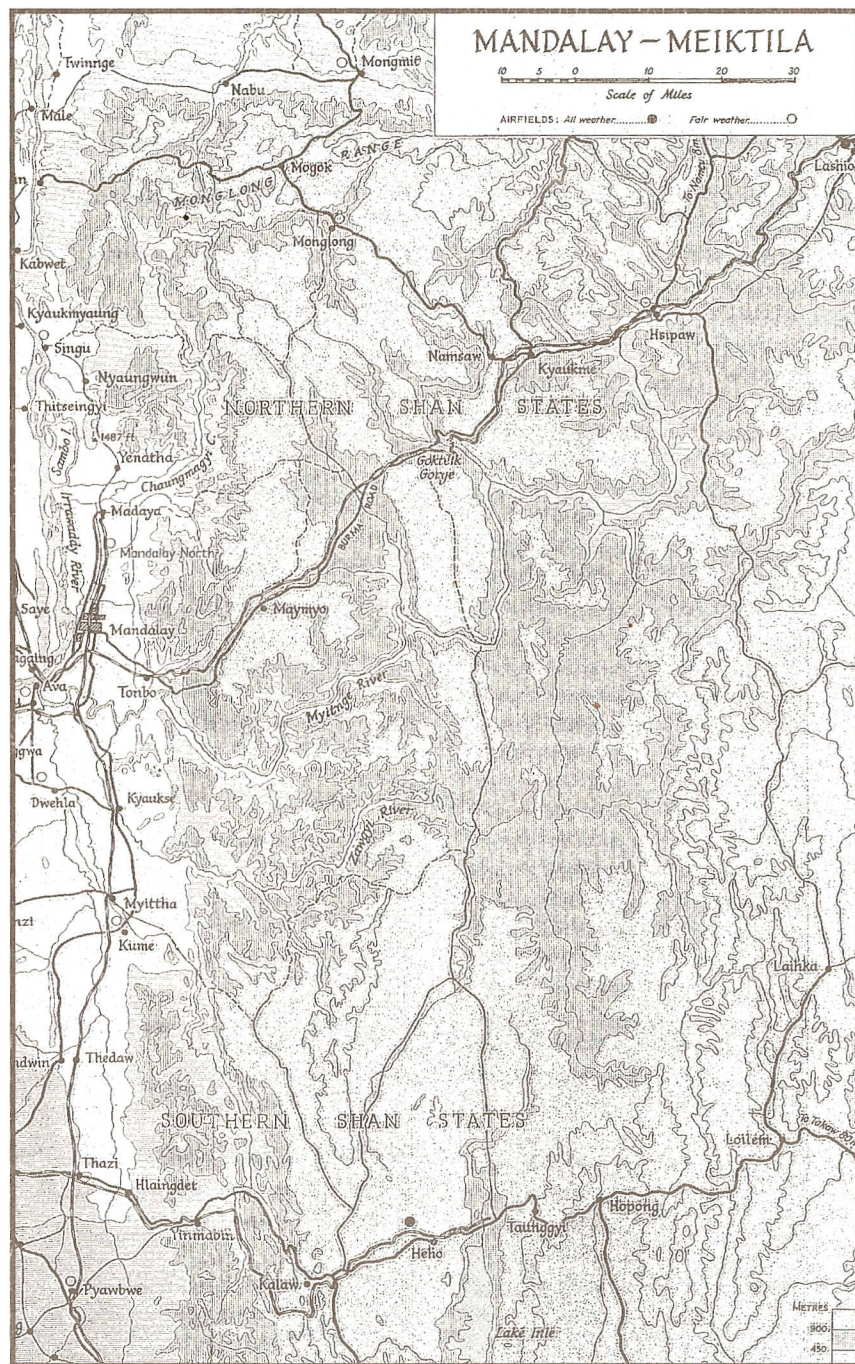
Apart from the FAE, whose story is set out in the next section, only two RB units were involved in this great undertaking, the 4 Corps field park company, and 20 Company from 5th Ind Div. The rest were all either Bengal or Madras.

305 Corps Field Park Company

At the time of the crossing, 305 Company was closely involved in the airhead at Sinthe. However, with divisional and corps troops engineers moving forward across the river, the work at Nyaungu had increasingly fallen to units in the rear, and Maj Prow came up to the new strip at Myitche, close behind A Beach, on 18th February to recce for a fresh stores dump. Although the ferrying after the breakout has been described as "a hum drum affair", it still amounted to some 400 trips each day, and much work was needed in the beach areas. Again Lt Toole has written: "The approaches consisted of Sommerfeld track which had to be continually reset because it curled up at the edges under heavy traffic. We were taken by surprise one morning to find that the river had risen several feet so that everything had to be repositioned. Although our weather was perfectly dry, the snows hundred of miles away had started to melt."

The field platoon installed tanks and pumps for the big water point at Nyaungu which was opened on 28th with a capacity of 4000 gallons per hour. According to Lt Toole "the water was pumped into one of two large tarpaulin-lined reservoirs for initial settling, and purification. During the time this took, the water in the other reservoir, now fit for use, was delivered through a system of pipes and taps to the queue of water trucks. Delivery was continuous during daylight hours." On 1st March the company's plant, which had been working back at Sinthe, arrived and was immediately employed with corps troops field companies on roads in the bridgehead area. From 2nd March onwards, the field troop provided crews to take a turn in the rafting at A Beach.

The company moved forward on 6th March, crossed the river, and set up camp in Nyaungu, leaving a guard on the dump at Myitche. At this time, the new airstrips at Taungtha were not in operation and much depended on the stores dumps at Myitche. A reporting office was set up on the airfield under a havildar clerk to keep Chief Engineer 4 Corps informed of arrivals. The field platoon continued finding rafting crews, a second water point was built on A Beach, and the first one enlarged. On 31st March, an advance party set out for



Meiktila in unit transport with Sgt Jennings. All the company's vehicles were 4x4 except the 4x2 Bedford water truck. One jeep unfortunately had taken a wrong turning and was ambushed by Japs; both jeep and driver were lost. The work at Nyaungu was handed over to the field park company of 7 Div, and by 5 April the company had moved complete and was encamped near the airfield at Meiktila.

20 Field Company

As the crisis developed at Meiktila during March, the army reserve consisting of the airborne brigade of 5 Ind Div was called forward, and with them came 20 Company. They had been training at Jorhat where Maj JD Holland had taken over command from Maj ET Abbott on 12th February. Lt Hambridge, with an advance party, left by air for Palel on 12th March, followed by Lt Corking with the MT on the 14th, and the company deplaned in Meiktila on the 18th while the strip was under periodic shell fire. They were beside the 9 Brigade 'Box' and their first task was to flatten the bunkers to improve fields of fire, using a D8 dozer loaned by 402 Field Company. The Japanese were well dug in on the edge of the airfield, and in the broken ground to the north, and were making liberal use of mines from their own dumps. For the next 10 days the company was closely engaged with their battalions in strengthening defensive posts, clearing mines, accompanying patrols, as well as sector defence at night. Lt Corking finally arrived with the transport on 31 March, so that at the end of the month they could draw breath and prepare for their next task - the epic dash to Rangoon.

Airfields across the Irrawaddy

After the 4 Corps breakout the scene of the fighting moved far ahead of the Sinthe airhead, with the Irrawaddy intervening, so that getting the very considerable quantities of petrol and ammunition up to 17 Div and the armoured brigade created near crisis conditions in the supply chain. More airfields were urgently needed, and a preliminary step was taken on 12th February when 363 Field Company took over all the work at Sinthe, thus releasing 402 Company and part of 24 Engineer Battalion to move forward. Once again, with their vehicles requisitioned for essential stores, the platoons had to march.

402 Company started work on a new site at Myitche, close behind A Beach, on 14th February and were joined there by part of the engineer battalion the next day. In addition to their airfield work, they were also called on to work on the Sommerfeld track across the half-mile wide sandy beaches. The first transport strip, 1500 yards by 50 yards was finished on 16th and extended by another 600 yards on 18th, using two graders, three D8 dozers, and locally found labour. Administrative services, (including part of 305 Corps Field Park Company), were quick to move in and by 19th February the airfield was a hive of activity. On 21st February, the day of the breakout, Maj McDougall was given a traffic priority to take 402 Company across the river to an ear-marked site at Ashe Miene, a small

village on the outskirts of Nyaungu. Part of the engineer battalion joined them there on 25th, and more followed on 27th so that a useful transport strip was working by the end of the month. A fair amount of tree-felling had been necessary to clear the flying approaches. 4 Corps now had two good strips established on either side of the Nyaungu crossing. The rest of the engineer battalion, meanwhile, had been busy back in the A Beaches maintaining tracks, laying coir matting, and building landing stages and water points. Maj ET Abbott had arrived from 5 Ind Div on 21st to take over from Lt Col HM Millar.

Pushing on to Meiktila

In March the situation in Meiktila became increasingly precarious. Japanese pressure was closing in on the airfield, some 2 miles from the town, where there were not enough troops for firm perimeter defence, and urgent work was needed on the airstrip. However, it was fortunate that some of the heavy plant of the Mechanical Equipment Platoon, on transporters, had been taken into Meiktila as part of the 17 Div thrust.

402 Company was ordered forward. Work at Ashe Miene was handed over and the company moved back to Myitche where its air-loading training came in useful for loading all the jeeps, and some specialist water-pumping gear into Dakotas. Maj McDougall, with the PM and Mahratta platoons, flew in by Dakota to arrive at Meiktila on 8th March. The plan was for Capt Faulds to bring in the remainder in company transport but the Japanese had blocked the road at Taungtha, immobilising some 1000 vehicles of the corps tail and supply columns for weeks before the surrounding areas could be cleared. Capt Faulds's party was uncomfortably stranded. "Our rations ran low and we had to rely on airdrops for essentials. What we received was a lottery. In one drop we had enough oranges to feed a battalion but little or no basics such as atta, rice or ghee. We were constantly nipping back to the Irrawaddy where a few carefully detonated grenades produced enough fish to feed a multitude."

At Meiktila the company moved into the barbed-wire defended box alongside the airfield. Capt Bernard Butler, the adjutant from HQRE was also with them. There were some useful Jap bunkers for use as headquarters, stores, and cookhouses, and in the first two days, slit trenches were dug for all-round defence. Their task was to get the second airstrip operational and, once again, Lt Bennett's platoon had to build the control tower. This time, however, they were able to incorporate a 40ft steel ladder taken from the railway station. After repeated shelling and attacks the Japs established a foothold on the north end where armoured cars made several sorties to evict them. Air traffic control by this time was being conducted from ground level, for safety reasons. Enemy shelling and incursions intensified so that the use of the airstrip was repeatedly interrupted, and on several occasions the company was involved in rescue from crashed or disabled aircraft, and in disarming their bombs. The crisis came on 23rd March when the airfield was out of action for 24 hours. Cut off by road, the only

supply possible was by airdrop on an improvised strip in the town. Casualty evacuation ceased, and the situation became serious. But the Japanese grip was weakening and matters improved towards the end of the month when Capt Faulds' party finally turned up, bringing the Sikh platoon and Lt D Morris with some heavy plant collected from Calcutta.

For his work during the siege, Maj McDougall was awarded the MC.

Taungtha

As part of the break-out, it had always been intended to exploit the site at Taungtha which lay on the railway from Myingyan to Meiktila and which would be well placed for operations to clear the bridgehead area. Japanese incursions imposed a delay, but the situation locally had improved on 21st March so that a start could be made, despite the fact that Meiktila itself was approaching a crisis. 24 Engineer Battalion had been working on the road out from Nyaungu to Ngathayauk to upgrade it for transporters and were able to move into Taungtha West to clear a strip 1500 by 50 yards. On 22nd work was interrupted by Japanese patrol activity, and the following day the airstrip itself came under attack, but by 24th March the strip had been levelled, complete with aprons for 20 aircraft.

363 Company had moved forward into Myitche at the beginning of March. The Sikh platoon took over some of the rafting work, and on the 9th the company, as the nearest unit, had the unpleasant task of dealing with the scene of a loaded C 46 crash, less than a mile away, in which some 40 were killed or wounded. Getting enough water to the airfield was always a problem, so an attempt was made on 14th, after careful survey, to divert a small stream from Thamadam. The 15th saw quite a promising supply, but fate took a hand on 16th when conditions changed and the trickle turned into a spate, threatening to flood some of the strip itself. Urgent earthworks had to be put in hand.

The company moved forward to start work on a new strip at Taungtha on 26th March. This was finished on 30th when the first planes landed on it. The engineer battalion, meanwhile, had moved back to the airfield at the river port of Myingyan to clear obstructions in the form of trenches 70 yards long by 4 feet deep and 3 feet wide which the Japs had dug across the runway.

The end of the first lap

This chapter closes at the beginning of April with the whole of 457 Forward Airfield Engineers together again in Meiktila. In three months they had travelled 237 miles, over some of the most difficult country in the world. There were still 300 more miles to go before Rangoon, a story to be told in the next chapter.

Nominal roll of those known to have served with RBS&M units in the Advance to Meiktila & Mandalay

401 (RB) Field Squadron (254 Tank Brigade)

Maj PG Barell
Capt AWG Harley
Lts WS Adams MC (B Tp Mah), K Ryden MC* (C Tp PM),
EPH Berry (A Tp Sikh - detached Arakan)
Subs Shah Zaman, Bhagwantrao More
Nk Mohd Din MM

HQ 5 Divisional Engineers

Lt Cols ECR Stileman, RC Orgill (from early 1945)[no other names known but some listed with the HQ in Chapters 18 and 20 are likely to overlap]

20 Field Company

Majs JD Holland (to hospital 5 March), W Speir (from HQRE 13 March)
Capt PF Holt
Lts FC Fisher, P Corking, GH Hambridge
Jems Mohd Sadiq, Laxman Dhanaute
CSM Mann

29 (RB) Field Company

Maj AK Dowse
Capt JD Hay
Lts RP Gilbert, Francis, WJ King, FW Heald, RVP Cummings
Sub Gajjan Singh
Jems Jahan Dad, Mehar Khan, Shivram Baburao Nangre
CSM Stephen
Sgt WL Pascoe

HQ 20 Divisional Engineers

Lt Col ARS Lucas, Maj JH Neill
Capts RE Greenway, TDS Rowland, BKS B Hartshorne
Lt S Pickett

92 (RB) Field Company

Maj JH Clark, Capt JB Irving
Lts EP Linton, RW Balston, GP Webb
Sub Jagat Singh; Jems Budh Singh, Bhagwan Sakpal, Mohd Shah
CSM Barrett

481 (RB) Field Company

Maj MI Prichard, Capts AN Fradgley, KDG Phillips
Lts JR Stagg, TW Prentice, J Elleray
Sub Abba Sable
Jem Pritam Singh
CSM Webb

HQ 36 Divisional Engineers

Lt Col PA Easton
Maj AN Fradgley (from 1 April 1945)
Capts Nicholson, OWA Kite (Adj), DC Rounthwaite, DW Boydell
Lt RM Dyer

30 (RB) Field Company

Maj RL Swain, DS Wilson
Capt J Parry-Rocke, DS Young
Lts WPM Egan, CP McNaughton, RM Rau, RM Dyer
Sub Ghulam Rasul

324 RB) Field Park Company

Maj G McKay, J Parry-Rocke
Capt DW Boydell
Lts RL Kini, KJ Rowland, PAT Wiggins

HQ 457 (RB) Forward Airfield Engineers

Lt Col B Utting
Capts B Butler, J Priestman
Lts CJ Cooper, RK Todd, B Butler, TL Satchwell, McDonald, GW Cole
Lt (QM) MKD Dockerell

24 (RB) Engineer Battalion

Lt Cols HM Millar, ET Abbott
Maj W Scott
Capts PF Cooke, JF Lloyd, DL Smith
Lt (QM) W Lang, Lt J Gray

363 (RB) Field Company

Maj C Baillie
Capt RS Brocksom
Lts GMW Gregory, FWC Haynes, JW White, Dudeney, TL Satchwell
Sub Chuhor Singh
Jems Wilayat Khan, Anandrao Jagdale
CSM Heasman

402 (RB) Field Company

Majs IG McLaurin, CF McDougall
Capts AW Clarke, WF Faulds
Lts DP Bennett, DC Morris, JT Plant
Sub Atma Singh
Jems Ali Akbar, Hazara Singh, Farzand Hussain Shah
CSM K Clayton

305 (RB) Corps Field Park Company

Maj WG Prow
Capt RBeaton
Lt PA Toole, TL Satchwell, KN Hickman
Jems Sheik Usman, Karim Ali, Mohd Inayat
CSM Lapworth
Sgt Jennings

CHAPTER TWENTY

RECOVERY AND RECONSTRUCTION OF LOWER BURMA

APRIL TO AUGUST 1945 - 14th ARMY

4 Corps	HQ 5 Div Engrs, 20 (RB) Field Company HQ 457 Forward Airfield Engrs, 24 (RB) Engineer Battalion 363 (RB) Field Company, 402 (RB) Field Company 29 (RB) Field Company (19 Indian Div) 305 (RB) Field Park Company 9 (RB) Bridging Platoon, 15 (RB) Bridging Platoon
33 Corps	HQ 20 Div Engrs, 92 (RB) Field Company, 481 (RB) Field Company, 401 (RB) Field Squadron

AUGUST 1945 TO AUGUST 1947 - 12th ARMY

4 Corps	HQ 457 Army Troops Engineers (previously FAE) to July 1946 24 (RB) Engineer Battalion to September 1946 29 (RB) Field Company to November 1946 363 (RB) Field Company to November 1945 402 (RB) Field Company to December 1945 305 (RB) Field Park Company to March 1946 9 (RB) Bridging Platoon to December 1945
Burma Command	(From early 1946 to October 1947) 19(RB) Field Company (formerly 27 Company)

**Compiled by: Captain AS Tweedie with passages by
Major WF Faulds and Major AN Fradgley MBE**

The background sources for this chapter are included in the introduction to Part IV. Unit war diaries have provided dates and names and some details. For the Sitang rail ferry and the Mytinge bridges the details are taken from articles in the RE Journals June 1948 and September 1954. Most valuable for the narrative are the memoirs of Lt Cols Sir Hugh Neill KCVO CBE TD, AB Rhodes and JHF Salberg, Majs C Baillie, WF Faulds and AN Fradgley MBE, and Cpts DP Bennett, Rev RVP Cummings and PA Toole.

Introduction - Overall plan April to August 1945

It was towards the end of March 1945 when Meiktila was finally secured and the enemy forces in the region were sealed off in the triangle: Mandalay/Meiktila/R. Irrawaddy. With the capture of Myittha on the 26th and Yaukse on the 31st the last main escape route to Siam was effectively lost to the Japanese and the triangle was reduced in size to Myingyan/Meiktila/River Irrawaddy.

This opened the way for a two-pronged advance towards Rangoon some 300 miles to the south:

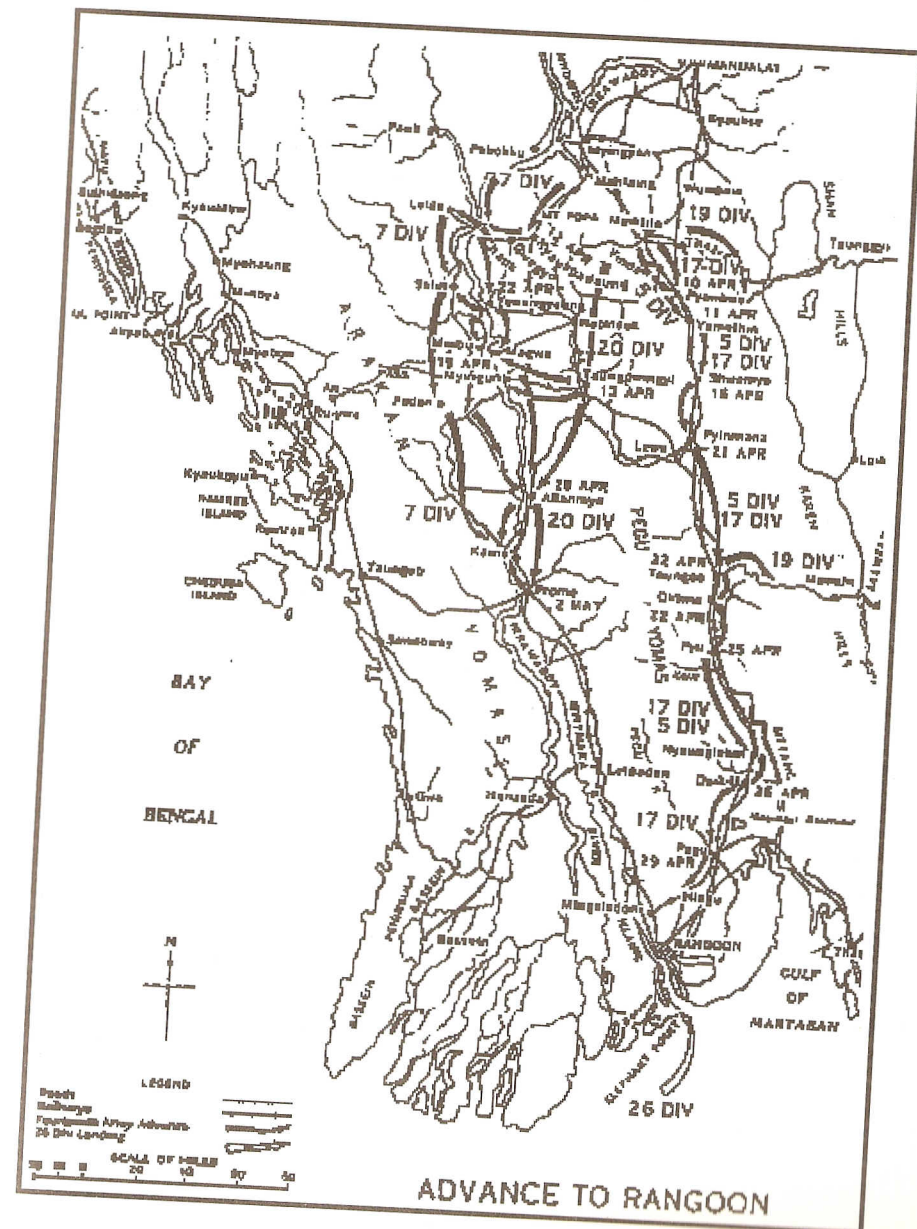
an eastern route via the Mandalay/Toungoo/Rangoon Road and the parallel railway, described as the longest and narrowest (400 yards) salient in the annals of military history

a western route down the Irrawaddy via Allanmyo and Prome.

Speed was of the essence with the oncoming monsoon only some six weeks away and so it made sense for the mechanised 4 Corps (5th and 17th Indian Divisions with 255 Tank Brigade) which was already further south than 33 Corps, to take the most direct eastern route, even if it meant the Corps moving NE/SW across 4 Corps line of communication in order to follow the western route, where there were still considerable enemy forces. 33 Corps consisted of 2nd British Division, 20th Indian Division and 268 Indian Infantry Brigade, eventually to be reinforced by 7th Indian Division (previously with 4 Corps).

Before describing the Army's advance down these two routes (and some other vital actions) we should remind ourselves of the logistical problems which faced the engineers whose responsibility was not only to enable the forward troops to keep going but also to provide the surface communications to supply them. The range of tasks allocated to the engineers involved many specialist units to tackle problems sometimes greater than the capacity of the normal division engineers. Many of those units were corps troops and their integration with the advancing divisions was a triumph of pragmatic and well thought strategies of the Chief Engineers of the two corps. The history therefore of the movements of the various units of the RBS&M makes for an intensive catalogue of events as it covers the detail of many actions made in support of many differing formations.

In Chapter 19, the work of 305 (RB) Field Park Company and 9th and 15th Bridging Platoons in conjunction with other sapper groups was outlined up to the break-out across the Irrawaddy; collecting and sorting redundant stores, salvaging enemy equipment, adapting it and making it readily available to the advancing brigades. These efforts were further re-doubled as the advance south from Mandalay/Meiktila gathered speed over greater distances, ever increasing use being made within the forward field companies of trade skills in improvising parts to keep mechanical equipment, motors, pumps and electrical gear operational so that delays in the advance could be minimised. It is recorded that during this phase of the campaign, some 25 Bailey bridges were built, a third of them multi-span, involving some 2,000 tons of bridging equipment; 12 airfields



were made from scratch or brought up to operational standards in addition to the 20,000 tons of other engineering equipment which were flown in during the battle for Mandalay and Meiktila, prior to the final advance.

4 Corps Advance

4 Corps set out from Meiktila on 30th March, the first objective being Pwawbwe, some twenty five miles south, with 17 Div in the lead. At Yindaw, heavy opposition was encountered and so 17 Div was ordered to bypass the area, leaving it to 5 Div, who were following, to clear Yindaw. 20 (RB) Field Company, in support of 5 Div, passed through Yindaw after its capture on 11 April and moved on to a position south of Yamethin. They were, however, halted at 0830 by an enemy attack ahead but were able to move on at 1500, harbouring at Aungtha for the night. The next day they made contact with 2 (Bengal) Field Company and recced a crossing 3 miles south of Pwawbwe (which had fallen to 17 Div on the 10th, and where 24 Engineer Battalion was later to establish its HQ on the 14th). 3 Platoon of 20 Company with a D8 bulldozer improved the crossing and completed a second crossing the next day. The company was then in support of operations south of Yamethin, providing a mine clearing party at Kyuangbyngon at MS300 on the Rangoon road. No mines were found but the party came under a barrage of fire and an enemy air strike. 363 (RB) Field Company had meanwhile also moved under command CRE 5 Div and had opened up two water points at Thazi. 402 (RB) Field Company had moved forward to Yamethin. 457 FAE, having taken over the Meiktila airfield, started work on Thedaw airstrip, where 24 Engineer Battalion filled 46 craters and built the control tower. 305 (RB) Field Park Company were active in support, providing transport to the corps pool and 19 Div, providing mechanical equipment to 74 (Bengal) Field Company. By 17 April the company's stores platoon was at Tatkon.

1 Platoon of 20 Company was now supporting 1/7 Dogras; the rest of the company was in reserve with 123 Indian Brigade. On the 16th April 1 Platoon was assisting CRE FAE at Sinthe Chaung with the rest of the company at MS10 north of Tatkon. By the 18th, 20 Company was in support of 9 Brigade in its advance along the railway axis to Pyinmana and came to a halt at Shwemyo Bluff because of enemy fire ahead. After moving along the railway they dug in at nightfall at Pyokke (19th). 2 (Bengal) Field Company made a crossing at Sinthe Chaung and diversions were constructed to bypass Pyinmana and numerous other chaungs were bridged or provided with tracking, but rain soon caused deterioration at these crossings and, later, when 17 Div came through, both the road and bridges became difficult to negotiate with their larger and heavier vehicles. Lt Hambridge carried out recces of alternative bridge sites east of the railway and 300 yards east of the main road bridge site to the north of Ngalaik. Villagers at Kyidaunggan reported that a Japanese gun was covering the railway and a patrol found six enemy dead there.

On the 21st HQ 5 Div Engrs became waterlogged at the Pyinmana diversion and 363 Company dozers and graders cut a new road 8 miles long. HQ and 2

Platoon working with 402 Company in the chaung managed to get the tail of 5 Div through but became bogged down themselves. The chaung crossing having collapsed, they took up a defensive position without resupply.

On the 23rd, 20 Company recced the railway line to Lewe and found it usable. At Lewe they received orders to go forward to Toungoo on the railway axis and thereafter to work forward to Pyu and Naunglebin. They were held up however by the rear of 17 Div, so they decided to move half the company by rail, using jeeps fitted with railway wheels, from Yeni to Toungoo but they were derailed and arrived at Toungoo two days after the other half of the company that had waited to use the road.

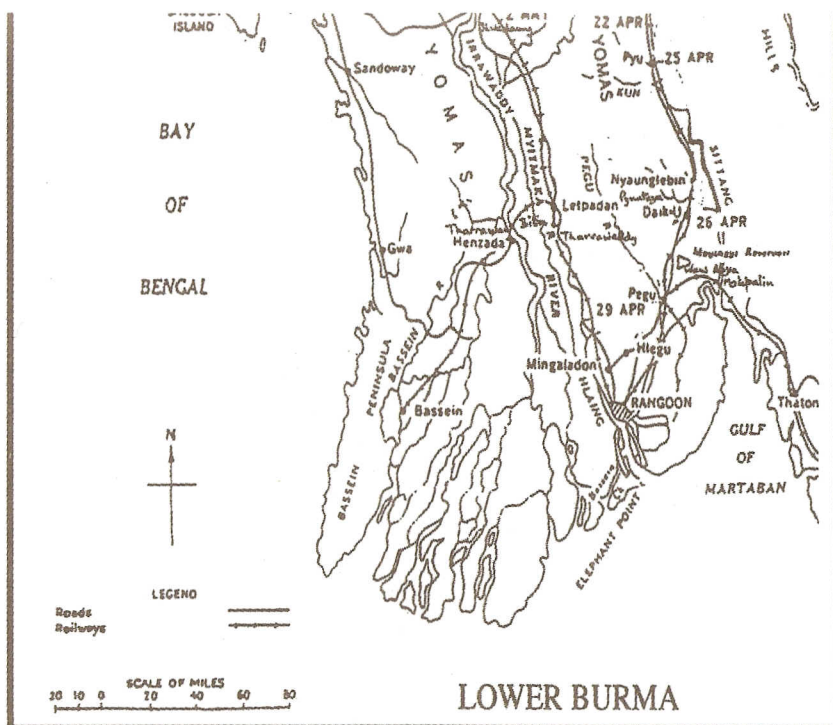
Whilst the above action was proceeding the Forward Airfield Engineers were moving fast forward and an account of their specialised role is set out later in this chapter.

Toungoo onwards (20 (RB) Field Company)

On 26th April, 20 Company left Toungoo southwards for Pyu, repairing gaps in the railway line, making diversions safe and creating fresh crossings at chaungs. They passed through Pyu on the 29th and went forward to Nyaunglebin; they were surprised en route by snipers and suffered casualties. To the south of Nyaunglebin they worked on the airstrip at Pyauntaza and completed the control tower there on the 30th. At this time, the main battle was being fought by 17 Div ahead, to the south, in their attempt to clear the enemy out of the key centre of Pegu. However progress was dramatically curtailed on the afternoon of 1st May when the monsoon arrived, two weeks earlier than expected, turning roads and fields into swamps and sweeping away the bridges. As a precaution both corps were placed on half rations. 5 Div was ordered to push east across the floods toward the Sittang where the Japanese were desperately trying to keep escape routes open. By the 1st of May 3 Platoon was mending a bridge at MS76, 19 miles south of Daik-U while HQ and 2 Platoon were further forward at Pyagyi with 9 Brigade. On the 4th they were diverted, 1 Platoon to Waw and 2 Platoon to Payabyo on the road running east from Pegu to Mokpalin (on the Sittang River, across which General Kimura had moved his HQ from Rangoon to Moulmein).

Lt Hartley recced the bridge at Waw. He reported that 150ft of the bridge was destroyed but that the railway diversion bridge could be repaired in one and a half days to Class 24. On the 2nd and 3rd the repair was completed while Lt Hartley attempted a further reccé at Abya Bode but was unable to reach the area through enemy positions.

3 Platoon recced the Pyabyo area and 2 Platoon commenced the construction of a 140ft Folding Boat Equipment bridge across the canal at Waw (5th). The next day 1 Platoon recced the railway to Abya and found the bridge wrecked. 2



Platoon meanwhile, carried out an engineering recce of the Pyabyo area including tide levels on the Sittang River. Abya was shelled and Lt Hartley returned with jeeps and one truck loaded with casualties, arriving at Waw late that evening.

It was necessary to get Stuart tanks forward of Abya Chaung, so a raft was brought forward by train. In heavy rain and despite enemy shelling, with fortunately no sapper casualties, the raft was built by 2000. On the 8th eight tanks were successfully ferried across the chaung by raft under mortar fire.

2 Platoon carried out a recce at Abya Thaiktugon and found 12 items of rolling stock on the 8th. Next day 2 Platoon made a rail diversion bridge at Abya Thaiktugon suitable for MT to cross. 3 Platoon were operating the ferry and developing Abya Chaung, while 2 Platoon recced the railway up to MS73 and found the bridge at Nyaungkashe (near Myityko) to be intact. On the 10th 2 Platoon operated the railway forward for the Brigade transport to Abya Thaiktugon. Because of falling tides it became difficult to operate the raft when loaded with Stuart tanks. 2 Platoon repaired gaps in the line to Nyaungkashe and moved the 1st Battalion Burma Regiment from Abya Chaung and 3/9 Jat Regiment from Laya, both to Nyaungkashe. Ferrying became easier with a rising tidal range, the water level being a foot higher than on the 10th. Patrols reached the Sittang the next day.

The 3/9 Jats were to cross the river in assault boats, crewed by 20 Company sappers, a distance of 2500yds (1000yds water, 1500yds mud). The crossing was postponed because of the tide. 9 Brigade wanted one company of 3/9 Jats to make the crossing, come what may, although difficulties were foreseen. On the 13th the attempt was made and the boats were soon in difficulties having to land on an island part way and only being able to refloat on arrival of the 'bore'. Lt Hartley reported that crossing using paddles was not feasible since the mud flats were only covered by a few inches of water at high tide and difficult to cross on foot. The Jats still wished to try again later in the night and it was agreed to carry out a feint attack on Sittang village to reveal defensive strength. All returned safely from the sortie.

On the 15th 2 patrols of Burma Regiment successfully penetrated to the N and SE edges of Mokpalin. On 17th 20 Company left for Abya Thaiktugon. On arrival 3 Platoon were to run the railway and provide road maintenance, including the bridge, at approx MS73. On 2nd June HQ moved to Waw and the company became responsible for the maintenance of the depot at Myitkyo. On the 5th they were attacked by 3 Oscars, strafing with AP bombs, 40 of which were blinds; there were no casualties. From the 12th onwards the company was involved in movements in the Abya/Nyaungkashe/Waw area until, on the 21st, the Sikh platoon of 75 (Bengal) Field Company arrived to take over these commitments; 20 Company then moved to Hlegu and were employed in recceing for a new campsite at MS16 on the Rangoon/Toungoo Road. This was the last activity of 20 Company in Burma. July and August were spent in training in readiness for a move to Malaya in early September.

Crossing the Sittang

The bridge across the Sittang at Toungoo had been destroyed by Allied bombing early in the campaign and the Japanese replacement timber trestle bridge (650ft long) had a 60ft gap in the centre, which 29 (RB) Field Company quickly bridged similarly with trestles. The eastern spans of the original bridge were blown to clear the wreckage. On 1st and 2nd May, a raft was constructed and taken to Kywebwe, half-way between Toungoo and Pyu and launched on the river nearby. 2 and 3 Platoons improved the approaches to this brigade ferry site. On the 4th 2 Platoon crossed to Dothaung to demolish the eastern span of the damaged bridge. 3 Platoon demolished a second span of the bridge. The remainder of the company were at MS175/2 on the Rangoon Road. A squadron of Sherman tanks was expected on 8th May and for two days before its arrival, 1 and 3 Platoons worked on the construction of an unusual Bailey tarpaulin raft, there being insufficient equipment available to construct a standard Bailey raft. Large tarpaulins were wrapped round a frame of Bailey parts with bitumenized hessian between the tarpaulins. The raft was warped by 3 Platoon down to the ferry site and, with 1 Platoon, they continued work at the ferry approaches. 2 Platoon, which was now under command 98 Brigade moved back to Toungoo and cleared mines and booby traps on the track to Indaingoon, continuing towards Thandaung. On 11/12th the tarpaulin raft was ready for 'sea trials'. Fortunately, it was decided to experiment first using a bulldozer, rather than a tank, and the 'lightly' loaded craft made it to the far bank just as the serious leaks began. All was saved when a 'proper' Bailey pontoon raft was delivered to site and the first tanks were successfully carried across the river.

On the 13th No 1 Platoon repaired a bridge on the Kywebwe/Myozo/Anauk Road (east of the river) to class 9. For some days further work was carried out on tracks around the ferry site and in preparatory work on the reconstruction of the eastern piers of the Toungoo bridge. A 40/70 Bailey raft was brought to within 1 mile of the ferry site but, because of strong currents, the raft had to be dismantled and delivered by road to the ferry site for reconstruction. For the rest of the month ferrying operations were successfully carried out, the road was revetted and an 80ft DSBB was unloaded at MS13/6 on the Mawchi Road. 1 Platoon dismantled a 30ft trestle bridge there and 2 Platoon replaced this with a 40ft SS. An 80ft landing stage for an FBE bridge was delivered to MS13 (Jerrards Cross).

The advance from Mektilla through Toungoo to Rangoon was rapid and it was anticipated that the Japanese troops sandwiched, between the eastern and western lines of the allied advance, would try to break out eastwards. At the same time the remnants of their 15th and 33rd Armies, in the Shan Hills to the east and near the mouth of the Sittang River, might attempt to break back across the Mandalay/Rangoon highway to effect a rescue mission for those trapped between the road and the Irrawaddy to the west.

19 Div was given the task of taking and holding two important roads that ran eastwards from the main road, firstly from Meiktila through Thazi to Kalaw,

Taunggyi and Hopong and secondly further south from Toungoo to Mawchi and the fork from MS13 north eastwards to Thandaung.

Operations on the Mawchi Road

Both these 'side' roads were through most difficult country, narrow, winding, crossing ravines and through dense jungle, giving ideal cover to enemy troops. The Mawchi Road, in particular, was hotly disputed and 65 (Madras) Field Company suffered many casualties as it moved forward with the mechanised force. 29 (RB) Field Company, in support, built bridges and crossings, ably supplied by 9 and 15 Bridging Platoons, until MS23 was reached.

During this very busy time on the Mawchi Road and under frequent shelling from the enemy, 29 Company (which had partially relieved 65 Company who had been under constant attack and great danger whilst removing mines from in front of the advancing tanks) and the supporting 15 and 9 Bridging Platoons made progress eastwards. For instance, on consecutive days 15 Platoon delivered an 80ft DS to MS17, a 60 ft DS/50 ft SS to MS17/4, a 40ft SS to MS17/6, a 40ft SS to MS18 and a 60ft DS 18/2, all under enemy fire. On the latter occasion 29 Company who were working on bankseats at 18/6 came under enemy fire and one sapper was killed. Lt FW Heald was wounded and died from his injuries received from own mortar fire. Five more bridges were delivered by 15 Platoon to 29 Company before the end of June and six to 65 Company by 9 Bridging Platoon in that period, mostly under fire. MS 21/1 was reached by the end of July.

The Rev RPV Cummings, who served with 29 Company before ordination, recalls that on June 4th Hav Naranjan Singh won an immediate Military Medal for lifting mines under fire. A few days later Nk Mohd Jan gained a Mention in Dispatches for outstanding forward reconnaissance achievements. Both were oblivious of their own safety, working in the open while protected by infantry hidden in the jungle. Cummings records that it was the proud boast of the Mahrattas that no two Baileys were built in the same way. The PM and the Mahratta platoons each built a permanent Class 9, 40ft bridge from teak logs left scattered along the track. The bridge at MS18/3 is reputed to have borne the following notice: "Shelling ¼ of a mile ahead; Stop! Listen! Go like hell!"

During August a steel wire rope was erected across the Sittang at MS25/1 and the flying ferry at MS24/3 was dismantled and reconstructed at the new location. On the 10th the company moved wrecked vehicles from between MS23/32 and 15/72 and cleared mines to MS29. 9 Bridging Platoon continued to supply stores to 29 Company including a 70ft SS at the "Staircase" at MS26.

While 457 FAE and its associated Field Companies were at Toungoo, 255 Tank Brigade with its engineer support (36 (Madras) Field Squadron) had penetrated into the outskirts of Pegu, which, with its three demolished bridges and the immediate onset of the monsoon, became a considerable barrier to progress,

especially as all three bridges were still in enemy hands. Nevertheless, after considerable resistance, the forward troops were able to gain a foothold on the eastern bank and start the last dash for Rangoon, only to be beaten for the honour when 26 Div landed from the sea and took the City. The reconstruction of the crossings at Pegu became very important to the final success in Burma and a full description of the problems and how they were overcome is given in Col Sandes description in history of the *Indian Engineers 1939 to 1947*. Initially the plan to repair the road bridge in the city centre had to be abandoned and attention was diverted to the most distant rail bridge upstream which, for a time, became useable but soon became impassable as the monsoon worsened. Eventually a floating bridge was built alongside the city road bridge but as the river rose 15ft overnight and a further span of the old road bridge collapsed, the floating bridge was washed away. Ferrying with motor boats became, for a time, the only means of crossing the river. A sudden fall in the water level enabled the intermediate upstream rail bridge to be converted by the addition of a high-level BB across the central gap and the whole bridge re-decked for road traffic. Later 305 (RB) Field Park Company took part in a more permanent post war solution to the Pegu problem.

The Airfield Engineers

457 FAE, which comprised two independent Field Companies, 363 (RB) and 402 (RB) and 24 (RB) Engineer Battalion, were an integral part of 4 Corps' advance strategy. The distance from Meiktila to Rangoon was 338 miles by road and 4 Corps managed that in approximately one month, fighting a major battle at Pywabe and overcoming major engineering obstacles to the crossing of rivers and keeping the main roads operating. Field Marshall Slim in his book *Defeat into Victory* summed up the role and effectiveness of the Airfield Engineers as the following extract from his chapter on the race to Rangoon. "We had often talked of this before; now we were to see if the methods we had devised would be the right ones. The leading division at the moment the 5th, would move with an armoured and motorised infantry group ahead. There would be a bound forward, as rapidly as possible, to seize an airstrip or site for one, the flight into it of airfield engineers, and the quick follow up of the air transported brigade. Then, while the brigade held the air base, cleared the surrounding country, kept open the road, or if necessary, reinforced an attack, the rest of the division would make its next bound. Each division would lead in turn, reach its objective, halt, and let the other through. There must be no pause. Airstrips would be required at least would be required at least every 50 miles, but preferably, to save transport, at more frequent intervals. The rate of our advance would be in direct ratio to the speed with which they could be brought into operation. In fact, after the first day we put airfield engineers with the tanks so that they could start work on airstrips at the earliest possible moment."

After the battle of Meiktila the two parts of 402 Company were reunited and were ordered forward under command of CRE 5 Div. More permanent works at Meiktila having been having been handed over to 24 Engineer Battalion. 363

Company was also placed under command of 5 Div and the two companies leap-frogged forward.

457 had set up a large mobile HQ and reconnaissance section and it was attended by the OCs of the field companies. Their prime role was to locate suitable existing airfield or airstrips for the communication and/or supply needs of the advancing divisions and to carry out whatever repairs, remedial or additional works were needed. It meant that the field companies had to be attached to whichever was the forward division and both companies came under the command of 5 and 17 Divs at various times in the chase down to Pegu. The companies' role was not confined just to airfields but included all the normal tasks of a field company. 363 opened up water points at Thazi whilst 402 dealt with alternative water sources where the Japanese had poisoned wells. In one skirmish 402 captured two machine-guns which were subsequently presented to the depot in Kirkee.

Logistically the advance was a nightmare and perhaps because the field companies were corps troops but operating under the command of the forward division, rations were often delayed or reduced. 402 reported that when they reached Hlegu their rations ran so low that twenty-four men were having to share a pack of compo rations for eight.

Between the 23rd and 29th of April both companies moved forward from the Pymina/Lewe area to Pegu. After the river crossing had been effected 402 Company was moved to Zyatkwint to assess the state of the largely brick paved airstrip whilst 363 moved down to Mingaladon. 402 Company was then under command of 7 Div. These airfields were earmarked to provide the main air base for the invasion of Malaysia. On the day the Japanese surrender was announced 402 Company had a reconnaissance party preparing to be parachuted into Moulmein.

363 and 402 Companies were mainly involved in the reconstruction and improvement of the airfield at Zyatkwint. 24 Engineer Battalion was involved in major work at the Pegu airfield, laying phenomenal amounts of PBS and PSP for runways and hard standings and, before leaving for India in September, worked on the terminal building at Mingaladon for BOAC. (When Maj Chartres-Baillie revisited Burma in 1982 he was interested (but not surprised) to see that huge quantities of PSP had been lifted, and reused by the Burmese authorities, to form vertical fencing and revetment along roadsides, and along the railway.)

On 1st June, Brig Gen Fred W Evans, USA, commander of Combat Cargo Task Force, wrote a letter of generous appreciation to Lt Gen Slim for the work of the FAE. The four CsRE were all thanked by name.

"The zeal displayed by your forward airfield engineers in constructing new fields in record breaking time, the excellence of the complete fields, and the fine cooperation demonstrated in conforming as far as possible to our every request in the matter of specifications and details of construction and maintenance, were a source of constant gratification to me and my staff, and to our operating

squadrons. We were able to rely at all times on the provision of suitable airfields to meet our supply landing needs, and in fact, on occasion found ourselves hard put to keep up with the amazing speed with which airfields appeared overnight."

After the Japanese surrender 24 Engineer Battalion took over 402 Company's work at Zyatkwint and 402 was assigned to a brigade of 7 Div for the liberation of Siam (see Chapter 24). The company HQ reconnaissance group flew to Bangkok while the remainder of the company sailed there in a converted landing craft, a long and sick-making journey for the men.

33 Corps advance down Irrawaddy

The 33 Corps' plan for the western route advance involved a strike at Kyaukpadaung by 2 British Div and 268 Indian Infantry Brigade, while 7 Div, which had joined 33 Corps from 4 Corps, moved down the Irrawaddy on both banks. The attack on Kyaukpadaung was, however, held up by a strong concentration of the enemy at Mount Popa to the north east of the town. So 20 Div, which had been approaching from that direction, swung south eastwards towards Natmauk and Taungdwingyi then west after bypassing Kyaukpadaung and so reached the Irrawaddy below Yenangaung in the oil fields area. By capturing Magwe and Myingun on the east bank they cut off the retreat of enemy forces being driven south by 7 Div. The Japanese crossed to the west bank and were pursued relentlessly southwards, their escape virtually cut off. The way was then open to take Allammye and Prome, the main gateway to Rangoon.

The RIE Group

In addition to two Madras Companies, Bombay Sapper units with 33 Corps consisted of HQ 20 Div Engrs, with 92 and 481 Field Companies, and 401 Field Squadron operating with 254 Tank Brigade. Lt Col Binny, the CRE, decided to create an RIE Group, whereby one field company would be with the leading brigade, always only doing enough to ensure the brigade's speedy advance, with the remaining field companies following on, tackling the heavier and more permanent tasks.

The first task of the RIE group was to open road communications in the Natmauk/Magwe/Taungdwingyi area. 92 Company, initially under command 32 Brigade would revert under command the RIE group once 100 Brigade took over the lead. 481 Company, waiting at Taungdwingyi, would then advance under command 100 Brigade towards Nyaungbintha. 92 Company also provided a detachment to support 4/2 Gurkha Rifles moving down the Irrawaddy.

These units, however, had a considerable distance to travel to take up their duties. 92 Company under 32 Brigade set out from Yeywa, in the Meiktila area and, before arriving in the Natmauk district, had on route constructed a light airstrip, built a Class 30 bridge and put in 30ft and 140ft FBE bridges across Dan

Chaung. 481 Company was well north of Meiktila in the Myittha/Kume district, not far south of Mandalay and suffered casualties when a jeep hit a mine on the Meiktila/Kyaukpadaung road. They made Natmauk by the 15th April and were soon involved in road works and repairing a rail bridge on the Natmauk/Taungwingyi line, together with two level crossings. For three days they worked on repairs at Taungdwingyi power station. On the 25th they came under command 100 Brigade for the advance to Prome via Lettet and Kobin, while 3 Platoon was in Posin and Egayit. By the 28th the whole company was at Shwegyaungbin and the next day were providing a diversion round a demolished bridge at the Bwetkye Chaung, south of Allanmyo.

401 (RB) Field Squadron at Yenang Yaung

401 Squadron was also to be part of the RIE Group but in a more mobile role. B Troop with 11 CAV and C Troop with 3 DG (A Troop had in February become an independent field troop and would later be replaced by a fresh troop from India, joining 401 at Prome). B Troop left Squadron HQ at Welaung on 9th April to join 11 Cavalry at MS9 on the Meiktila/Kyaukpadaung Road and was soon involved in an armed recce to Zayetkon, lifting mines. The column moved south via Zayetkon to Natmauk. C Troop moved to Pagan on the Irrawaddy under command 3 Dragoon Guards on the 15th. On the 17th they were west of Kyaukpadaung for an attack on the chaung there. One section with 30 men was up with the tanks, removing demolition charges and mines; guns and MT were captured. On the 20th the column moved to the NE of Yenangaung. Tanks attacked the high ground to the north and 2 roadblocks were encountered, which were cleared. On the 21st the armoured column moved into the town, removing a road block but then coming to a blown bridge. While recceing for an alternative route, the enemy opened fire and was found to be covering the blown bridge. Spr Qarim Din was severely wounded but four Japanese were claimed by C Troop.

The following citation describes the action:

"On 21st April 1945, Lt Ryden was commanding the detachment of Sappers and Miners in the armoured column which entered Yenangyaung from the east on that morning. This column advanced unopposed until a blown bridge was met and the sapper detachment went to the head of the column to investigate. At this moment the enemy opened heavy fire with LMG's and rifles from all sides at a range of less than 100 yards. Seven of our infantry were quickly wounded on the very open ground. Without the slightest hesitation and completely disregarding his own safety, Lt Ryden went into the open to recover the wounded. Three times he went out and brought back wounded to safety, where they were covered by the tanks.

"This officer's courage, determination and complete disregard for his own safety was an inspiration to all who saw it and is typical of this gallant officer's actions throughout this campaign."

This citation, put forward by the CO of 3 Dragoon Guards, resulted in the award of an immediate Military Cross, the earlier MC won by Lt Ryden at Shwebo (see previous chapter) being gazetted as a Bar to this immediate award.

The enemy withdrew during the night so that the 3 Dragoon Guards column was able to move round to the south of the town on 22nd and join up with the armoured car column of 11 Cavalry at Taungdwingyi. This was the column which had taken part in the sudden and dramatic seizure of Taungdwingyi on the 14th. B Troop of 401 Squadron had been with them, reconnoitring the bridges and making crossings and causeways, in particular, at the meandering Yin Chaung between Natmauk and Myingon which required a tremendous amount of filling to make it passable. (After the rains began, other units found it to be a fast flowing water obstacle up to 800 yards wide.) Approaching a bridge on 15th, they came under fire and lost sappers Daula Jamle and Dhaku Jadhao killed, as well as the Troop Jemadar and five others wounded.

The thrust to Prome and after

The two columns combined and pushed south towards Allanmyo, taking with them the advanced part of the RIE group consisting of B Troop 401 Squadron and 3 Platoon of 481 Company. Allanmyo was taken on 28th April, the column moving on to Bwetki, twelve miles south of the town. Another forty-mile dash brought them to Prome, which was taken on 2nd May just as the rains began.

The rest of 481 Company made up the rear part (Group B) of the RIE Group which followed up making more permanent repairs of the hasty crossings left behind by Group A. The restricted air supply meant that rations had been reduced and a proportion of vehicles had been grounded to allow more petrol and ammunition for the advance. 92 Company were further back, in support, with 32 Brigade whose vehicles had been temporarily handed over to 100 Brigade at the front. HQ 401 Field Squadron arrived in Allanmyo on 12th May, and Prome the next day, bringing with them the long awaited replacement A Troop from India.

Beyond Prome, 481 Company (with B Gp) created a diversion around a demolished bridge over Nawin Chaung with an FBE raft Class 12. When the company was re-united at Shwedaung, six miles south of Prome, on 5th May, work continued on a diversion at Inma on the Shwedaung Paungde road and a further diversion round a demolished bridge at Kantha which was cleared and made ready for a replacement Bailey. The bridge at Hlesaing was repaired. On the 9th May 1 and 2 Platoons constructed an elephant bridge while 3 Platoon continued work on the Hlesaing bridge. For the next two days they were bridging Wegyi Chaung. 481 Company then returned to Shwedaung to dismantle the Class 40 raft over Nawin Chaung and made an unsuccessful attempt to move four tri-partite piers down Nawin Chaung to the Irrawaddy; the water was too shallow. On the 14th however, the four piers were moved as far as Shwedaung and an FBE ferry of three rafts was put together to operate between Shwedaung on the east bank to Padaung on the opposite bank. These rafts were to be towed by a gunboat. Two artillery quads were ferried.

During the next week (15-22nd) preparations were made for a thrust down-river towards Bassein. One company 1/1 Gurkha Rifles and a battery of 23 Mountain regiment were taken across to Padaung on 23rd, with the rest of 1/1 Gurkha Rifles following on the 24th. After a 48 hour postponement, this operation was cancelled since Bassein had already been occupied by other 14th Army troops. However, JARCOL, a subsidiary force consisting chiefly of 4/10 Gurkha Rifles with some supporting arms (including some spare assault boats) was to continue guarding the west bank of the Irrawaddy southwards towards Henzada. In support of JARCOL, 481 Field Company ferried six jeeps, three trailers, and twenty tons of stores at a new site at Paukkon. However, on 30th May it was clear that Henzada would more suitably be taken by a river crossing from Tharrawaw on the east bank, so JARCOL, with its stores was brought back at the ferries, both at Paukkon and at Padaung to the north. All troops were now back on the east bank of the Irrawaddy, and on 4th June as much bridging equipment as possible was loaded onto vehicles in readiness for a proposed Tharrawaw/Henzada crossing.

Meanwhile, on 3rd May, 92 Company, after completing the bridge at Bwetki Chaung, were involved with 481 at Nawin Chaung and the diversion at Kantha, but after this they parted, 92 Company working at Gyobingauk (south of Zigon) on a light airstrip and a trestle bridge. On the 10th and 11th they built a single span FBE bridge over a gap and a 60ft trestle FBE bridge over the Minhla Chaung. At Thonze, south of Tharrawaddy they made a diversion and built a 120ft floating bridge at Letpadan. On the 15th they moved south again to Thonze to reconstruct the Japanese timber trestle bridge. On the 20th, 92 Company worked on a partially demolished concrete slab bridge at MS71. Two timber trestles were built to replace damaged piers. Between 21st and 26th they carried out a thorough reconnaissance of the railway facilities to Tharrawaw, just north of Henzada on the branch line to the Irrawaddy. On the 30th May the company tested the railway from Letpadan to Tharrawaw. At the beginning of June they were at Letpadan and 1 Platoon went to Teinmimiyok to work on a culvert and a broken bridge just to the north. On the 8th June the company recc'd bridges and roads in the Tanbingon area (lying at the end of an eastern branch line to the northeast of Letpadan). On the 11th they started a regular rail service between Letpadan and Tharrawaw using the restored wood-burning locomotive "Tharrawaddy Thunderbox" as well as some rail jeeps. 481 Field Company had also had a hand in getting the track repaired. 3 Platoon left on the 12th to blow a bridge and ammunition dump at Zagyauung but were unsuccessful due to enemy action.

From the 5th June 481 Company returned to the main road south at Letpadan. At the Kadin Bilin Chaung a Class 12 Bailey (built by Bengal sappers) had collapsed under the gross overload of a D8 bulldozer on transporter. Maj Neill remembers, "I arrived on the scene to find the general marooned on the wrong side and he gave me hell, even though it was nothing to do with us! We immediately built a 120ft FBE bridge alongside." The next day a start was made to replace the FBE with 130ft DS and 50ft Bailey spans on crib piers. On the 9th the Bailey bridges were completed and open to traffic enabling the FBE to be dismantled and

loaded on to transport for future use. The dismantling of the collapsed Bailey, to enable the transporter and D8 bulldozer, was completed by 13th.

In the mean time 2 Platoon of 481 Company left Letpadan by rail for Tharrawaw. There they ferried one company of 1/1 Gurkha Rifles in storm boats across the Irrawaddy to Henzada. They were shepherded by the HMGBs *Pamela* and *Una*. These two renowned 14th Army craft were basically motorised wooden barges "with an exposed cannon of sorts". Denied any RN status their title stood for "Home Made Gun Boats".

For the rest of June and July 481 Company was resting and training, except for the repair of the Bilin Bridge where an abutment was washed away on July 11th. First attempts to fill and concrete failed due to a sudden rise in water levels. On the 12th, it proved possible to pour the concrete and the repair was complete by the 18th. The company was represented when CinC ALFSEA Lt Gen Christison visited HQ 100 Brigade. Later the OC, Subedar, Jemadar and one sapper attended a parade at Hmawbi for the CinC India General Sir Claude Auchinleck. News of the Japanese surrender came through in mid-August as the company, which had been operating the ferry from Tharrawaw to Henzada, packed up its gear to head for a forward concentration area north of Rangoon, prior to leaving Burma.

In July and August, 92 Company was also 'winding down' although they were involved in maintenance at various bridges at Minin Chaung and Okkan south of Thonze. In mid-August, they received a warning order to move and by mid-September they were on their way to Saigon by sea.

With hindsight, it is understandable that a lot of confusion and frustration became evident as plans were put into operation and frequently changed or cancelled. Commanders on the ground were not privy to the one major event that was to bring such a swift end to the war. The decision to use the atom bombs at Hiroshima and Nagasaki was only made a matter of days beforehand at the Allied Summit attended by Churchill, Truman and Stalin. Less traumatic, but nevertheless just as frustrating to the companies on the ground, was the withdrawal of experienced officers on repatriation and on leave and the lack of organised leave for the jawans. This was rectified once the war ended. Despite these concerns, it is clear that such a magnificent achievement could not have happened without a rare combination of courage, fortitude, excellent training and high morale displayed by all who took part.

Post war reconstruction

Although the Japanese surrender took place on 14th August 1945, it was some time before all enemy forces on the ground capitulated. Many isolated pockets of resistance were met as the work of post-war reconstruction began, making the work somewhat hazardous. Company War Diaries continued to emphasise the need for caution, particularly in areas away from the main roads, eastwards towards

the border with Siam. Some of the units which had taken part in the final push towards Rangoon were about to be transferred to Malaya, Indonesia and Vietnam at the end of August and early September: HQ 5 Div and 20 Company went to Malaya and later Java; 92 and 481 Companies went to Saigon.

Units remaining in Burma continued with the work of improving road and rail communication, repairing or rebuilding bridges and developing airfields for the support of military operations in other eastern theatres and for internal civil operations. There was plenty for them to do. The tide of war had passed the length of Burma twice in a period of 5 years, each side blowing up bridges as they went and building temporary structures as they pursued. Roads had taken a battering from abnormal traffic and materials for repairs had always been in short supply. In this post-war aftermath and up to the time of the partition of India in July 1947, the Indian Sappers were to have a leading role, working with the Civil Power and with local labour and, for at least part of the time, with Japanese engineers and labour. Some notable feats of engineering were achieved and some, involving Bombay Sapper units, are highlighted below.

The suspension bridge at Pegu

Mention has been made earlier of the bridge situation at Pegu. 4 Corps Troops carried on the work started by 5th Div engineers and replaced the temporary arrangements at the demolished road bridge by constructing what was, by all accounts, a novel form of Bailey: a 320ft suspension bridge. Peter Toole, who was with 305 (RB) Field Park Company, described how the bridge was tested before being put into general use, when he drove a fully laden 10 ton truck across the bridge slowly, stopping from time to time and recording the sag by using a dumpy level on the bank sighted onto a staff on the centre of the bridge. The vehicle was a MAC 6x6 loaded with a D4 and stores to the required load. The tensioning of the cables was adjusted as the vehicle progressed to the far side. (A model of the Pegu bridge is on display at the RE Museum in Chatham, giving the impression that it was sited in open country, when in fact it was in the centre of town.)

The Sittang River rail ferry

The Pegu bridge and others made it possible to move vast quantities of road building materials from the Mokpalin quarries to other parts of Burma but, first of all, the quarries had to be brought back into commission and a way found to transport 1000 tons of laterite and stone per day across the Sittang. The quarries had been linked to the main trunk railway system by a branch line but the bridge across the Sittang had been destroyed as 17 Div was driven back at the beginning of the Burma campaign in 1942. Still in existence, however, was a single line leading to a jetty on the river, which had been used for the loading of river craft. This jetty was a mile below the destroyed railway bridge and it was decided to use it as the supply point for two ferries crossing to the west bank; a terminal there being linked by rail to the main line west of the damaged bridge, and connected also

to the road system. The engineering problems were immense; the tides on the river varied by some 15ft and there was an annual change of level in the river of some 10ft between seasons. Furthermore at certain times of each lunar month, two currents in the estuary combine to produce a 'bore' which rushes up the river at up to 15mph. These tidal conditions meant that there would be certain days when the ferries could not operate continuously, if at all. To maintain supplies at the required level 40 bogie wagons or 84 trucks would have to be transported daily and, on average, this would mean that each ferry would have to make two return trips every day. Initially it was decided to build two ferries, each capable of carrying either seven bogies or fourteen trucks; these were later increased in size to ten and twenty respectively. It was the design of the landing stages which caused the greatest difficulty, having to cope with a severe tidal variation, the annual change in level of the river and the 'bore' which produced a current of ten knots.

The ferries had a number of short tracks laid across the craft, rather than length wise for navigational reasons, which meant that each track had to be brought opposite the landing stage track in turn. The landing stage was divided into three separate parts to avoid the hogging and sagging which would have occurred with a length of over 200ft, especially during the bore. An 80ft TS Bailey was used as a half floating span to take up tidal variation, connected from the intermediate pier to the final bank seat by similar Bailey spans. Jacking arrangements allowed the gradients of the jetty to be adjusted for differing seasons but a minimum gradient of one in ten meant that bogies and trucks had to be moved on and off using D4 caterpillars, so both the ferries themselves and the approach spans had to be flush-decked. Other adjustments had to be made to cope with the tilting of the ferries as the rolling stock moved over the ferry edge and this was accomplished using an 18ft ramp hinged to the end of the BB and hooked over the gunwale of the ferry. Other problems were overcome as operations began (see RE Journal of June 1948). The ferries were each 165ft by 50ft with a displacement of 600 tons, crewed by 4 officers and 24 ORs constituting two watches. The motive power was from 3x110 HP Murray Tregurtha outboards, steered by turning the whole propeller assembly around its vertical axis, a great help in bringing the craft alongside. Many units were involved in this triumph of engineering ingenuity and the Ferries 'Pinafore' and 'Patience' were handed over by the construction party to the maintenance and operating parties in February 1946. Among the many participating in this project was 457 Army Troops Engineers (previously 457 Forward Airfield Engineers). This episode is of particular interest to Bombay Sappers as the original railway bridge was destroyed during the retreat in 1942 by the Malerkotla Field Company. 24 Field Company was also involved in the withdrawal and demolition.

Also in Lower Burma, 29 Company was active in the post-war period at Thawatti (S of Pyinmana) preparing piers for the erection of a Calender Hamilton Railway Bridge over the Sittang. In December 1945 the company moved north to Maymyo (east of Mandalay) to build a new low level bridge and dismantle the high level bridge. After working on monsoon accommodation for 17 Div in the Meiktila area in

the Spring of 1946 they were called in September, to provide an armed guard and to operate the railway water point at MS41 on the Meiktila/Myingyan road during the general workers' strike, which lasted until early October.

9 Bridging Platoon, who had been very active in support of operations on the Mawchi road, moved (in September 1945) in support of 19 Div at Taunggyi on the road east from Meiktila towards the Siam border. There they supplied bridging equipment to field companies working along the Salween river at Hsipaw. In November, the platoon's war diary stated that there had been cases of 'Plauge' (sic) which could hardly have been less painful than the real thing. All troops were inoculated. They remained in the Taunggyi area until the end of the year.

363 and 402 Companies were mainly involved in the reconstruction and improvement of the airfield at Zayatkwint. 24 Engineer Battalion was involved in major work at the Pegu airfield, laying phenomenal amounts of PBS and PSP for runways and hard standings and, before leaving for India in September, worked on the terminal building at Mingaladon for BOAC. (When Maj C Baillie revisited Burma in 1982 he was interested (but not surprised) to see that huge quantities of PSP had been lifted, and re-used, by the Burmese authorities to form vertical fencing and revetment along roadsides, and along the railway.)

The Myitnge bridges

At the upper end of Lower Burma, nine miles south of Mandalay, the Myitnge river, flowing out of the Shan hills to the east, joins the Irrawaddy. There the main road and railway from Rangoon crossed the 600ft wide river on two bridges some 200ft apart. Both these bridges had been destroyed and the remains of all the wrecked spans lay in a tangled mass below the damaged piers. The road bridge had consisted of continuous lattice girders supported by steel columns filled with concrete. The rail bridge had been built of Warren trusses 5 x 150ft and 1 x 80ft on five brick piers. The advance south at the beginning of 1945 had been across a 830ft TTBB supported by repaired piers and this had carried all the road traffic and a metre gauge jeep railway. This bottleneck was the only route from north to south Burma, apart from the Irrawaddy and by air. Trains arriving from the south had to be uncoupled and the trucks shunted across by a small locomotive, for re-assembly on the north bank. Bullock carts and pedestrians had to cross at dawn or dusk.

The task set the sappers was to restore road and rail facilities completely without interfering with traffic. 4 Corps Troops Engineers, of which 305 (RB) Field Park Company was a member, together with 75 (Bengal) and Faridkot Field Company, a plant troop, a railway bridging company, and a Japanese engineer battalion began work in January 1946 to build a diversion loop line, crossing a new bridge 1½ miles upstream and a Bailey pontoon bridge alongside the original road bridge. After these were completed and in operation, the TTBB would be dismantled, the piers restored, and a new Warren bridge, shipped from India, put across. The

railway bridging company completed the upstream loop and bridge by 20th February. The Bailey pontoon road bridge was also quickly built and opened a week before the rail bridge. This 576ft bridge consisted of 2 x 90ft TS landing bays, 2 x 70ft DS landing bays, 2 x end-floating bays and 4 x floating bays. All was fine until the rains came! The river rose 24ft in 14 days (June 1946) and the bank seats and approaches had to be raised to compensate, jacking up the bridge and inserting steel cribs bolted to the ones underneath. At the time the jack operators were working in 4ft of water until the problem was solved by bolting some panels to the top chord of the landing bay, which allowed the jacking to be performed some 20ft from the bank seat on dry land. The Japanese Surrendered Personnel (JSP's) were never to be outdone in all this work against the clock.

With the diversion railway bridge and the floating road bridge complete it was now time to dismantle the TTBB built earlier in the year and to repair the original abutments and piers to take the Warren girders when they arrived from India. It took four weeks to dismantle the TTBB superstructure. Shuttering was erected at the two abutments ready for the pouring of concrete, and sand and aggregate were delivered by rail into huge bins, from where it was moved in carrying boxes by the JSP's to the concrete mixers and then poured. The most northerly pier (No 5) was similarly constructed, conveying the concrete from the mixers via corrugated iron channels to an elevator which hoisted the mix to the top of the shuttering and discharged it for spreading. This was not too difficult an operation as pier 5 was above the water line. The damaged 4th pier was a different proposition, since it stood mid-stream and was severely cracked. It was decided to cut off what remained of the pier 6ft above water level, using necklaces of beehive charges and to pour concrete into the exposed cavity. The problem was that the expected cavity did not appear. Chipping away at the brickwork eventually revealed solid concrete beneath, 3ft of which had to be removed before the cavity, which was in two compartments divided by a concrete wall, became visible. Before concrete could be poured, there remained the difficulty of sealing the cracks, which were below low water level. Although the downstream compartment was relatively sound a small crack had been enough to allow all the sand to escape and for sludge from the river bed to have seeped in. 305 Company produced an effective sludge pump driven by three trailer fire pumps connected in series. With a clean compartment floor but under 12½ft of water, it was possible to begin pouring concrete but no quick-setting cement was available so 305 Company produced a stove-pipe which would permit a controlled flow of concrete to be delivered in dollops to the bottom of the pier which was then gradually raised by chain tackle fixed to a gantry. In this way the downstream compartment was filled with solid concrete.

The monsoon, with its likelihood of flood water, was approaching and much work still needed to be done on the upstream compartment. To avoid this potential flooding a 4ft rim of concrete was built on top of the pier stump. A large tarpaulin, weighted with railway metal, was unfurled on the upstream face to eliminate, as far as possible, any scouring effect of the current rushing through the cracks before the concrete had had time to set. Close underwater supervision would be required

to ensure the cracks were blocked and the compartment properly filled. A Bengali diver from a salvage company working nearby on the Irrawaddy was hired with his diving equipment for this task. He did not last long as he was overcome by claustrophobia and, in his panic, forgot to operate the air release valve. His suit blew up like a balloon and he was trapped under a concrete plug, spreadeagled and had to be pulled out by his leg! He refused to go down again and disappeared with his diving suit and helmet but fortunately left his airline and rotary hand pump behind. Using a respirator face piece to which the airline was connected, three volunteer British officers maintained a diving rota in what had become 30ft of water to ensure that the cracks were barricaded with sandbags filled with strong mix concrete and that the concrete plug, which had slipped at an angle to the bottom of the compartment, was tamped securely with concrete below and above. A modified stovepipe, made of canvas, was found to be more appropriate than the metal pipe. The divers worked in terrible conditions, unable to see anything because of the cloudy water and with unpleasant after effects from the cement penetrating their skin. The work was handed over to the Burmese authorities on 6th July 1946, ready to receive the Warren girders, yet to arrive from India. (See RE Journal of September 1954 for further details)

There was one other Bombay Sapper unit, not so far mentioned, which arrived by sea in Rangoon early in 1946. This was 19 (RB) Field Company (formerly 25 (RB) Field Company), which was brought out from India under the command of Maj Rhodes. (The original 19 Company had been captured in Malaya in 1942). The company moved to Mingaladon, north of Rangoon and, for six months, was engaged in the construction of a Command Stores Depot, which gave a wealth of experience to the unit's tradesmen. While working there, General Aung San, commander of the Burma National Army, was murdered. The police suspected U Saw and were convinced that certain incriminating pieces of evidence had been thrown into Rangoon Lake, on the shores of which was situated U Saw's house. Eight Mahrattas of 19 Company volunteered to dive into the lake to try to find the missing articles. Parts of a Sten gun were found. As a result, the Mahrattas were required to give evidence at U Saw's trial, which was a drawn-out affair, two of the men not being able to return to India until February 1948. Maj Rhodes reported that, although there were no problems, Sub Mir Dad had warned him that many of the men were worried about the situation in India, following its partition, and were anxious to return there. The CRE Colonel Pipe-Wolferstan arranged for them to embark on the *SS Karagola* on 20th October 1947. The PMs were moved immediately to Karachi, after a short stay in a transit camp near Madras, while the Mahrattas and Sikhs were returned to Kirkee.

General Aung San's daughter later became the elected Prime Minister of Burma but the military Junta were still, in effect, holding her prisoner in 1999.

Nominal roll of those known to have served with RBS&M units in the recovery and post war reconstruction of Lower Burma from April 1945

HQ 5 Div Engrs

CRE	Lt Col RC Orgill
Senior Engineers	Majs W Speir and CA Rayner
Adjutants & Field Engineers	Cpts TE Patrick, PF Holt and McSweeney
LOs	Lts SR Palmer and K. Pearson

20 (RB) Field Company

OCs	Majs JD Holland, ER Fisher
2ICs	Cpts PF Holt, FC Fisher
Section Officers	Lts P Corking, DA Hartley, GH Hambridge, Osborne
Jemadar	Moh'd Sadiq
IORs	CHM Aqal Jang, Hav Arjun Singh, Nk Surtan Singh

24 (RB) Engineer Battalion

CO	Lt Col ET Abbott
Majs	W Scott, AB Yates, J Gray, Grimshaw
Cpts	PF Coke, JF Lloyd, DL Smith, RS Brockson, JHF Salberg
Quartermaster	Lt W Lang
Subaltern	Lt GMW Gregory

HQ 457 Forward Airfield Engineers

CsRE	Lt Cols B Utting, PE Holmes, McCarthy
Majs	J Priestman, T Macdonald, Kerridge
Cpts	CTCooper, TL Satchwell, GW Cole, JW White, Dickson, Butler, Osborne
Lts	AJ Burrridge, GJ Lyons, HA Bristow, G Hawden, HT Easdale, Searle

363 (RB) Field Company

OC	Maj C Baillie
2 IC	Capt RS Brockson
Section officers	Lts D Dudeney, FWC Haynes, JW White, GMW Gregory
Sub	Chuhor Singh
Jems	Wilayat Khan, Harbunr Singh, Amandrao Jagdale, Nimbalkar, Khan Saman

402 (RB) Field Company

OCs	Majs CF McDugall, OMR Arnell
2ICs	Cpts AW Clarke, WF Faulds, JT Plant, AJBurrridge, D Morris
Section Officers	Lts DP Bennett, GJ Lyons, HAS Bristow
Subedar	Atma Singh

29 (RB) Field Company (19 Indian Division)

OCs	Majs AK Douse, JD Hay, J Lindsay, RD Mitchell, Arden, Papworth
2ICs	Cpts RP Gilbert, DR Eales, DR Johnston
Section Officers	Lts MT McNulty, LAC Bruce, RS Robinson, C Oakes, RVP Cummings, FW Heald (Killed 10 June 45)
Sub	Gajjan Singh

HQ 20 Div Engrs

CRE

Senior Engineer

Adjutants

Fd Engrs and LOs

Lt Col RAG Binny

Maj MI Prichard

Cpts RE Greenway, TDS Rowland

Lts SH Pickett, AJ Ellery, BKS B Hartshorne, R Thomas

92 (RB) Field Company

OC

Maj JB Irving

2ICs

Cpts EP Linton, GP Webb

Section Officers

Lt RW Balston

Sub

Jaqat Singh

481 (RB) Field Company

OCs

Majs JH Neill, JPA Jackson

2ICs

Cpts RS Amsden, JR Stagg, TW Prentice

Section Officers

Lts AJ Ellery, HW Stevens, RAW Cochrane

Sub

Abba Sable

401 (RB) Field Squadron

OCs

Maj PG Burrell, AWG Harley

2IC

Capt WS Adams

Section Officers

Lts J Wilkinson, H Rutledge, K Ryden MC (& Bar)

Subedar

Bhagwantrao More

BNCOs

Sgts May and Kirby

305 (RB) Corps Field Park Company (33 Corps)

OCs

Maj WG Prow, JR Beaton, MS Dayal RIE

2ICs

Capt PA Toole

Subalterns

Cpts/ Lts TL Satchewell, KN Hickman

BWO & NCOs

WO2 Lapworth, Sgt Jennings

Jem

Sheik Usman, Karim Ali, Moh'd Inayat

9 (RB) Bridging Platoon

Capt Anand RIE

15 (RB) Bridging Platoon

Capt JN Mullan

19 (RB) Field Company (1946-47)

OC

Maj AB Rhodes

PART V

**OPERATIONS OVERSEAS INITIATED
POST-WAR**

AUGUST 1945 TO AUGUST 1947

When the war ended in 1945 RBS&M units were deployed as far afield as Burma and the Mediterranean. However, the cessation of hostilities did not lead to the immediate end to such dispersion overseas, but saw a range of new involvements for units of the Royal Bombay Group, some in places unfamiliar to the Indian Army.

In Europe, British forces were facing new problems in the aftermath of the war, whilst instability in the Middle East and political uncertainty in India made the presence of British forces essential for the protection of British interests and the maintenance of order. The effects of repatriation and demobilisation schemes stretched British military manpower resources in meeting these requirements. In the Far East particularly, where the areas invaded by the Japanese had to be recovered and secured, the Japanese garrisons disarmed and repatriated, the thousands of Allied prisoners of war and civilian internees to be rescued and repatriated, the extent to which British Army units could be used to perform these tasks was very limited. Since the majority of the divisions which had fought the war against the Japanese in Burma had been Indian, it was not surprising that these post-war tasks were accomplished only with the large-scale participation of the Indian Army.

The territories involved in the Far East were not only pre-war possessions of the British, but also those of allies such as the Dutch and the French, who initially could not provide troops of their own and their return was often resented by the indigenous populations whose nationalist aspirations of independence had been fostered to some extent by the Japanese in order to gain their co-operation. In due course both the British and the Indian Armies had the additional commitment of contributing representational contingents to the British Commonwealth Occupation Force in Japan.

Thus in the two years after VJDay on 15th August 1945, Royal Bombay units had deployed on active service from Palestine to Japan and in many other places outside India and Burma. The seven chapters in this part describe those operations outside India and Burma in which those units were involved.

The Royal Bombay units involved were:-

Chapter 21:	20,24,30,91,93 and 485 Feld Companies 324 Field Park Company HQ 5 Indian Divisional Engineers HQ 629 Army Troops Engineers
Chapter 22:	30,92,402,481 and 485 Field Companies 324 Field Park Company HQ 20 Indian Divisional Engineers HQ 457 Forward Airfield Engineers HQ 629 Army Troops Engineers
Chapter 23:	99 Field Company
Chapter 24:	20, 24,28, 91,98, Field Companies 328 Field Park Company HQ 5 Indian Divisional Engineers HQ 458 Forward Airfields Engineers
Chapter 25:	96 Field Company
Chapter 26:	363 Field Company
Chapter 27:	49 Army Troops Company 482 Field Company 99 Field Company 217 Independent Field Stores Platoon

CHAPTER TWENTY-ONE

MALAYA AND SINGAPORE

1945 - 1947

Compiled by Major ID Usher

The Military Background

Pointing downwards from South Burma is the Malay Peninsula, the narrow northern part belonging to Siam (now Thailand) and the wider southern part forming in 1941 the Federated and Unfederated Malay States and the Straits Settlements, with Singapore at the tip. To the north lay Siam and beyond that, to the east, French IndoChina. To the west and south-east lay what was mostly the Netherlands East Indies.

The rubber, oil, minerals and produce of all sorts from this area were plundered by the Japanese, and by 1945 Malaya and the archipelago were in a sorry state. The industries were wrecked, the rubber plantations dying through neglect and the inhabitants suffering hardship and seething with discontent under what they considered to be merely a change of masters. It was into this scene of material want and economic turmoil that the British and Indian forces were launched after the conquest of Burma.

Plans for Operations "Zipper" and "Mailfist", the invasion of Malaya and the island of Singapore, were prepared some time before the dropping of the atom bombs on Japan brought the war against the Japanese to an end. The responsibility for these operations was that of Fourteenth Army under General Sir Miles Dempsey. The plan was to form a bridgehead into the heart of the Malay Peninsula between Singapore and the main Japanese forces, believed to be in the north to meet an anticipated Allied advance southwards from Burma. The seaborne invasion was to be carried out by 34 Corps under Lt Gen OL Roberts. Once an expected Japanese counterthrust from the north had been defeated and the position consolidated, a thrust southwards towards Singapore would be made. 34 Corps's assault would be made by 25 Ind Div with 46 Indian Beach Group under command, and 23 Ind Div with 3 Commando Brigade and 41 Indian Beach Group under command. 5 Ind Div was to follow up behind 25 Div with a part of 45 Indian Beach Group to augment the resources on the beaches.

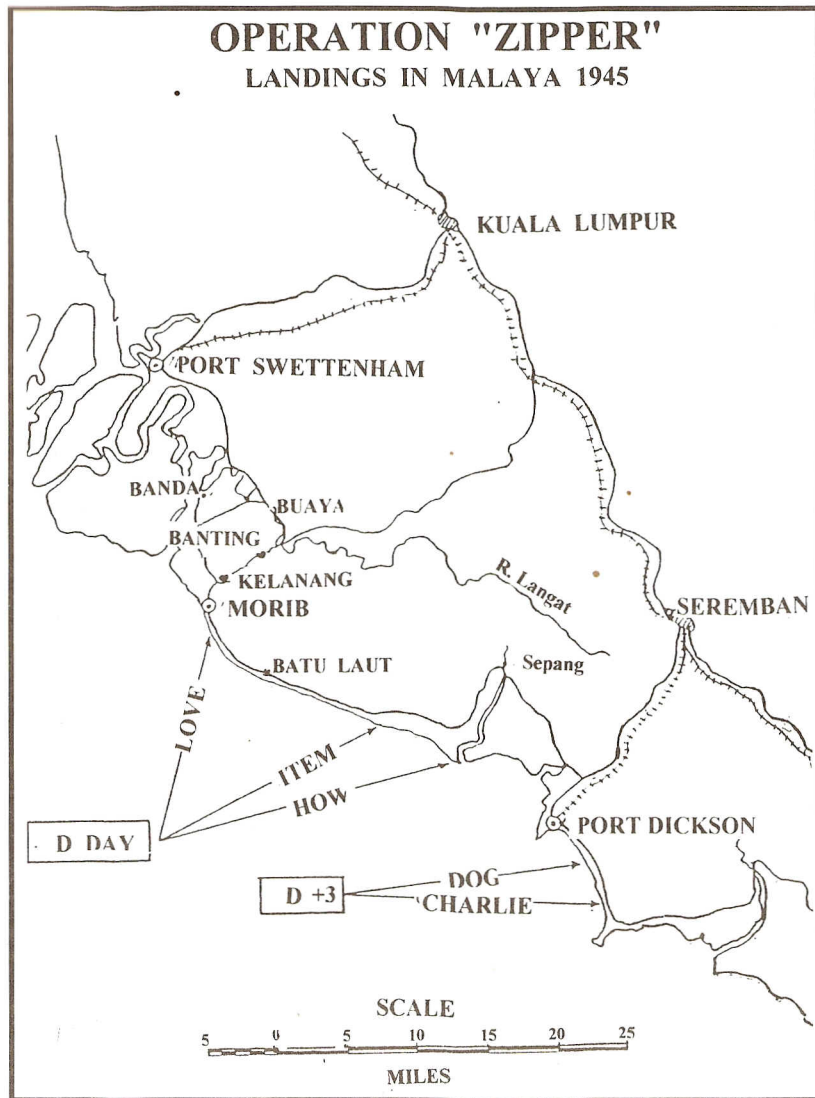
The Indian Beach Groups

46 Beach Group contained two Bombay units, 24 Field Company and 489 Independent Field Stores Platoon; and two other Bombay units had been in

another Beach Group until it disbanded. In July 1943, with operations overseas in view, the Indian Expeditionary Force (IEF) was formed. It was to contain five Beach Groups (41, 42, 43, 44 and 45). Their role was to assist the assaulting troops to land over the beaches and then maintain them from the Beach Maintenance Area (BMA). Early in 1944 this force, re-designated 33 Corps, was drawn into the Burma campaign to meet the Japanese offensive and had to abandon its amphibious ambitions. The five beach groups were left to the somewhat uninterested care of Southern Army. There being little likelihood of their being used in amphibious operations for some time, many of the units in them were claimed by Burma as reinforcements for 14th Army. In mid-1944 three Beach Groups were disbanded and by the end of June, only 41 and 45 Groups remained. When the need for a Forward Airfield Maintenance Organisation to extend the scale of air supply operations in Burma was identified, 45 Beach Group was converted to that role. Meanwhile it was decided to increase the strength of the Beach Group to enable it to handle up to 1000 tons of stores a day. There was a strong engineer element consisting of a field company, a mechanical equipment platoon and a stores platoon. There was also an engineer battalion but this had no engineer role and its work could have been done by an infantry battalion if there had been sufficient in the Indian Army. In addition there was a strong RIASC element of Supply and POL sections, an amphibian GT company with its workshops, and three fire-fighting sections. Other elements included Ordnance, IEME, Provost, Pioneers, and attached were a RIN Beach Commando and RAF Beach Unit. 41 Beach Group was the only one which took part in any operational landings; these were in the Arakan. When the decision to proceed with the "Zipper" landings was taken, 46 Beach group was completing its training after its formation, and 41 Beach Group was to be brought back from Burma to be re-equipped. 45 Beach group would be re-organised and trained in Burma and part of it deployed from there.

The modified plans for "Zipper"

In the event the original plans for Operations "Zipper" and "Mailfist" had to be modified considerably in detail, for a variety of reasons. One was the introduction of the PYTHON scheme for the extensive repatriation of British personnel. Another was the requirement to take over from the Americans responsibility for large areas in the East Indies previously under United States control, with consequent withdrawal of American air and sea support. This may have been because of US refusal to assist their European Allies to regain control of those parts of their erstwhile Far East empires lost to the Japanese. The dropping of the atomic bombs on Hiroshima and Nagasaki, leading to the surrender of the Japanese a few days later, meant that no opposition to the landings in Malaya and Singapore was expected. It was decided that 5 Ind Div would not follow up 34 Corps but join 15 Corps in Singapore and Johore until it moved further overseas. This meant a loss to 46 Beach Group, supporting 25 Ind Div's landing, of 45 Beach Group's resources of Sapper effort of one platoon of a field company, two companies from an engineer battalion, a mechanical equipment



platoon, 89 DUKW's and a lot of engineer equipment. Because two LSTs were also snatched from 25 Div at the last moment and the vehicles intended for them had to be crammed into the remaining LST, vital engineer stores had to be reduced. For example, a load of 300 yards of prefabricated roadway panels was reduced to 100 yards.

General Roberts's plan envisaged the early capture of Port Swettenham and the development of airfields there and at Kelanang. The D-Day assault had therefore to be made across beaches as close to Port Swettenham as possible and certainly north of the vulnerable bridges carrying the coastal road over the River Sepang. The only beaches that seemed remotely suitable were in a seven-mile stretch between Morib and Batu Laut, though none looked ideal. Fortunately, the beaches chosen were the least bad of a poor selection. "Love" and "King" beaches on the left and right respectively, seemed to have sandy surfaces though in the event the sand proved to be only four inches deep, over soft mud. The plan for 25 Div's assault was briefly as follows. The assault was to be made on 9th September 1945 with two brigades up, 53 Infantry Brigade on the right over "King" beaches, 51 Infantry Brigade on the left over "Love" beaches, less a force of all arms called "Langatforce" which was to assault in LVT and some craft up the river Langat to seize crossings at Bandar. Infantry from 51 Brigade was to assault in DUKW's across beaches and move inland to seize crossings at Buaya and the light bridge at Banting. CRE 25 Div was then to establish Class 40 ferries across the river. All vehicles were to land over "Love" beaches and to pass inland along the road to Port Swettenham. Simultaneously 37 Infantry Brigade of 23 Ind Div would disembark over two beaches further south, "How" and "Item". Because of lack of sufficient naval craft the assault of 23 Div had to be in two phases, the second being on 12th September ie D+3. when 1 and 49 Brigades would land.

The "Zipper" landings.

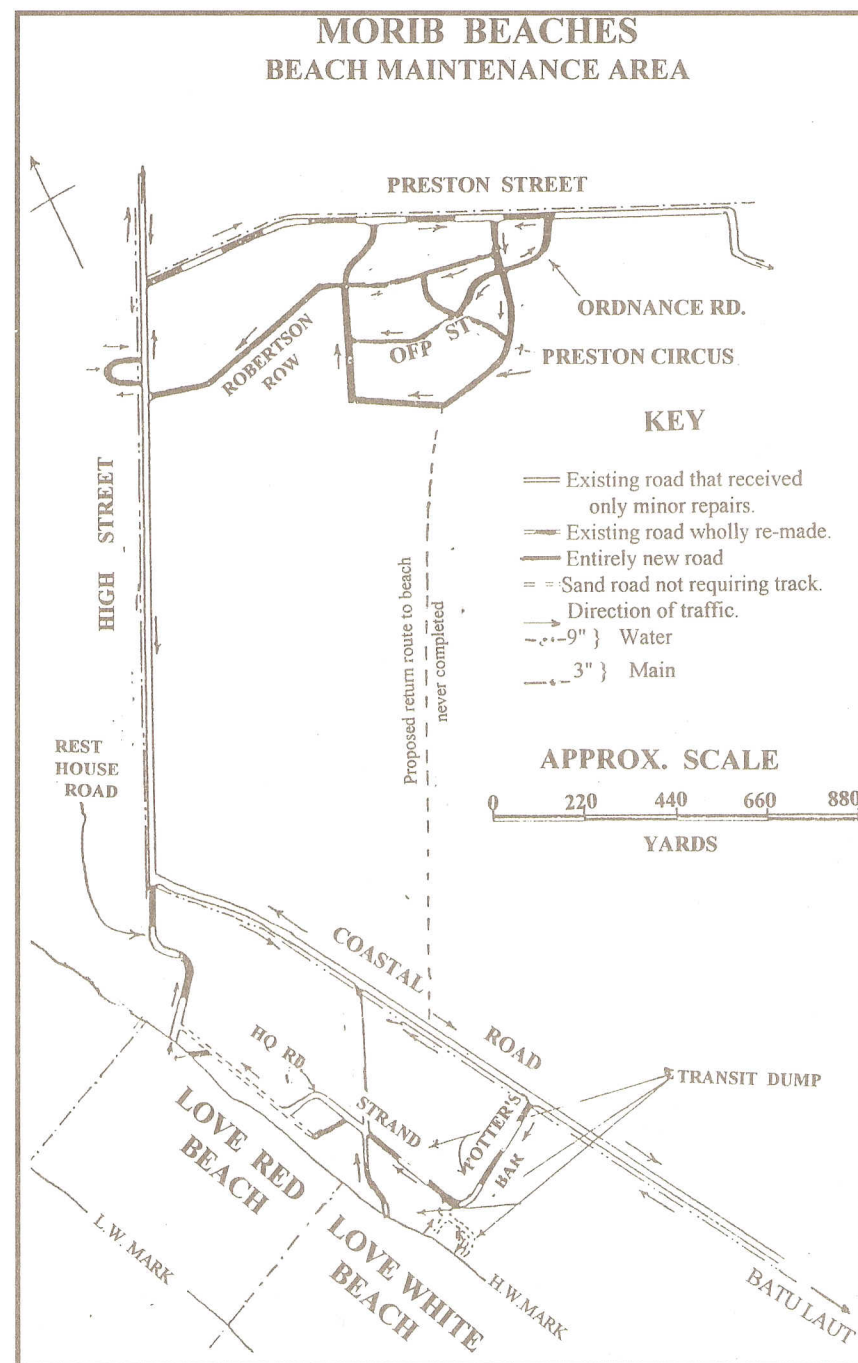
The first waves of 51 and 53 Brigades and 46 Beach Group landed at Morib on D-Day according to plan and on time. The only opposition encountered came from a high-ranking Japanese officer who by choosing the wrong moment to arrive to discuss surrender terms caused an enormous traffic jam. The problems on "Love White" beach started once the LCMs and LSTs arrived with vehicles. After initial reconnaissance by the Beach Commander and Beach Master had indicated clearly that "Love White" was unsuitable for landing vehicles and its immediate hinterland unsuitable for vehicles and stores, it was agreed that vehicles should not be unloaded until beach roadways had been built for them. Unfortunately whilst this was being organised a senior Naval officer ordered all vehicles to disembark at once. Before they could be stopped several attempted to do so and were soon bogged down well over their axles in four feet of water. The landings on "Love Red" encountered similar problems because Officers Commanding Troops in the LSTs did not obey the instructions of the Beach Commander to wait for his orders before discharging their vehicles but started

on their own initiative. Large patches of mud on the beach and the fact that beach roadway panels had not been laid in all cases resulted in 52 vehicles being stuck in the mud up to their chassis. Of a total of 83 vehicles swamped on the two "Love" beaches all but one were recovered, 70 were repaired and put back on the road. On a lighter note, the Beach Group commander related how, "owing to the changeover from war to peace, officers landed with an increased scale of baggage, all of which had to be landed by the Beach Group. A tri-service trio had to hire fifteen coolies to carry their baggage as the Beach Group worms turned and refused to touch it."

The "Zipper" landings involved seven Bombay Sapper units. These were 24 Field Company and 489 Independent Field Stores Platoon, both in 46 Beach Group, 91 Field Company in 23 Divisional Engineers, 93 Field Company in 25 Divisional Engineers, 30 and 485 Field Companies and 324 Field Park Company, the last three all in 629 Army Troops Engineers (629 ATE). All these companies had returned from Burma to India and in preparation for "Zipper" had carried out amphibious and other training for their future roles (See Chapter One).

Capt Feather of 24 Company related how they "embarked on the *Glenroy*, the headquarters ship for the Morib landing. In the early hours of 9th September 1945 the "Zipper" fleet assembled off Morib. At H+15 with my PM platoon I landed with dry feet at the northerly end of "Love Red" beach. We were greeted from a distance by a British officer and an Oriental-looking officer with a red hat-band. My jemadar wondered if we should shoot him but I thought he might be one of Chiang Kai Shek's adherents. We subsequently learned a high-ranking Japanese officer had arrived in the area at about the time of the landing."

Lt Moss of 93 Company had been assigned a special task and did not embark for Morib in the same ship as the rest of the Company. With an NCO and three Sikh sappers he was to land with the first assault wave and take up a position with a company of Gurkhas on the left flank to prepare for the breakout from the beachhead and capture of the airfield some five miles inland. After describing the excellent food he enjoyed on passage to Morib, and the morale-boosting sight of battleships like HMS *Nelson* and the Free French *Richelieu* as they escorted the invasion flotilla, he goes on to relate: "We went over the side at first light, the sappers loaded like the proverbial Christmas tree, with mine detectors, picks, shovels, crowbar and axe, guncotton slabs, and the wireless set as well as personal arms, rations and other gear. Be that as it may, we all got safely down the net into the landing craft with barely time enough to admire the lines of ships, each in its allotted place and ready to shoot if need be. So far, so good! The snag came later! The craft heading abreast for the shore hit sand some 300 yards short, on a spit running parallel to the beach. Instead of assaulting in line in open order, we paddled on the spit, turned sharply to the right and walked unhappily in column, sitting targets, until the spit turned inland and we could march on dry land. Thereafter – insofar as they concerned us – events moved



according to plan. When we reached the airfield it was already occupied by fighters flown off the accompanying carrier."

No good word can be said of the two beaches, selected from air photographs, for the D-Day landings of 37 Brigade, "How" and "Item". Both were flat and muddy. "How" was considered quite unsuitable for landing vehicles or stores. Despite the efforts of the Sappers (not RBS&M) in 41 Beach Group to build roadways using "Muckamuck" (which were prefabricated roadway panels consisting of double bamboo paling sandwiched between a lower layer of coir matting and a top layer of ARC mesh) the use of "Item" had to be abandoned after the unloading of two LSTs, the remainder being sent to Morib. The second-phase landings on D+3 were made over two beaches at Port Dickson, "Charlie" being used for vehicles and "Dog" for stores. There were good existing roads and tracks behind the beaches and a main road and railway leading inland from Port Dickson. The landings over these two beaches went relatively smoothly and were more or less incident-free. It was over them that the companies in 629 ATE made their landings.

Lt (later Maj Gen) Madhav Rau of 30 Company recalled "All our vehicles were waterproofed and we sailed from Bombay on the Polish liner *Sobieski*. The monsoon was in full swing and most of us were deplorably seasick on the way. We anchored off the west coast of Malaya near Port Swettenham after a voyage of about ten days. A vast fleet of warships and craft of all types had congregated off the west coast. From the liner we transferred to an LCI (Landing Craft Infantry). This is a tricky exercise when the sea is rough but luckily for us it was like a mill pond on that day. To our amazement (when we got ashore) we found a Japanese welcoming party on the beach who were bowing to us with monotonous regularity. Their discipline was so good that after fighting like tigers during the war, they completely packed up after being ordered to do so. There was not a single case of sabotage against us. There was chaos on the landing beaches. The main thing was that everyone knew the war was over and there was no need to break your back if the job could be done at a more leisurely pace. I heard there was even greater chaos on a landing beach further north at Morib, near Port Swettenham. The sand looked firm there, but it was a thin crust on top of a substratum of mud. Quite a few tanks gently sank until only the turrets could be seen. These tanks were being recovered for days afterwards.

"My unit had the job of laying improvised trackways on the beaches, as all the mines and any obstacles had been cleared by the Japanese themselves. Laying Sommerfeld track on coir mat, channel track and so on was not very satisfactory. I have never seen so much equipment piled up anywhere as on those beaches. As far as engineer equipment was concerned there were literally mountains of Bailey bridging parts and thousands of boats of all kinds. Not even one-third of this equipment was used as there was no war, but the engineers threw up a large number of bridges all over the country. At the end of the war Malaya was in a mess. The economy was in ruins and food was scarce. It was surprising, though,

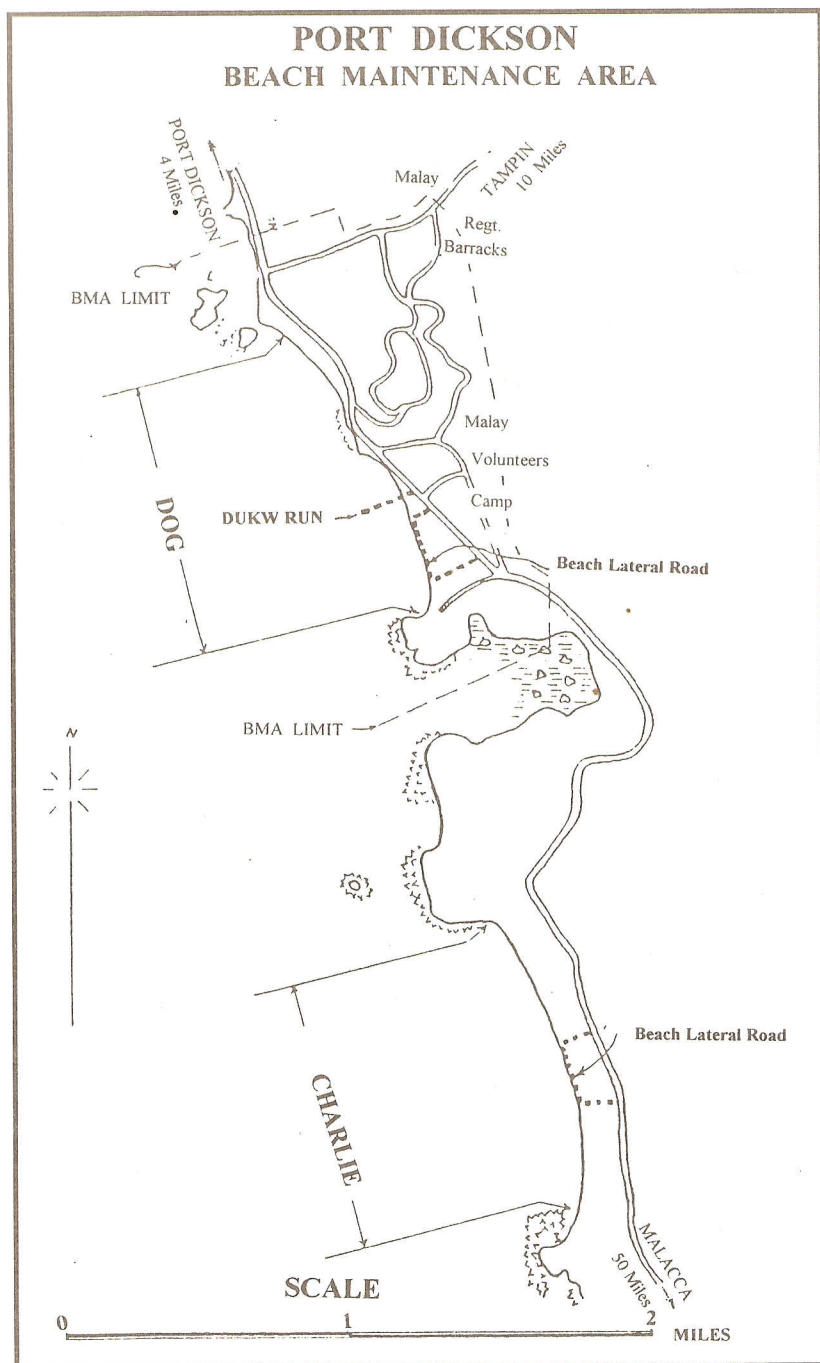
that some people craved for cigarettes more than food. You could get anything for a tin of 50 Gold Flake cigarettes which were part of the rations."

Lest one should draw the wrong conclusions from this description of the beaches, it is only fair to point out, as Colonel Price does, that beaches can only be kept clear of stores if there is a correct balance between transport, ships and plant.

Maj Fradgley, OC 30 Company recalls: "D-Day was planned for 9th September. David Young MC rejoined the company just before we left Lake Beale and we finally sailed from Bombay in HT *Sobieski* on 7th September. We disembarked at Port Dickson on the 19th having lain off the Port Swettenham beaches for two days. The general chaos on the beaches has been described elsewhere and to begin with we supplied working parties on beach roadways, clearing wrecked stores, pontoons and bridging materials from the beach area and carried out some accommodation tasks. We were also involved in preparations for manning the local power stations and distribution network in the event of expected disturbance which fortunately was averted."

Capt (later Colonel) SH Clark of 485 Company describes his embarkation and subsequent landing at Port Dickson on 12 September: "We embarked on LST 2119 at Bombay complete with vehicles and plant plus an RIASC company with a full complement of DUKW's. The voyage was uneventful - the war was over but we had been told that as it was not certain that all Japanese units would surrender or stay in their camps, "Zipper" would continue as if it were an opposed landing. It was very fortunate it was not opposed! 485 Company's task was to provide exits from the beach area to the road at Port Dickson - a PoW camp was to be relieved and all units to be assisted to leave the beach area.

"The CO and many of the crew of the LST had never taken part in a combined operation for real. At their first attempt to land they struck a sandbank about a mile from the shore. I was standing on the tank deck waiting to disembark with a Bergen rucksack on my back weighing (it felt) about 100lbs and containing guncotton slabs, primers and detonators. When the bow doors opened I could see it was a long way to the shore and to my left the Gurkhas were disembarking in water so deep that you could only see their tin helmets and rifles held above their heads. I climbed the ladder to the foc'sle head and said I was going to launch two DUKWs and see if they floated without touching the bottom. They floated merrily away and never touched bottom until they reached the shore. I therefore refused to allow any further disembarkation. The LST had to withdraw and return to the circus in the assembly area. Three hours later we had another go, trimmed right down aft and minus the DUKWs. Again I stood on the tank deck and felt a huge jolt as we hit the shore, and waited for the bow doors to open. There was a great deal of movement on deck but the doors would not open. I climbed up to the foc'sle to find two sailors sawing off two large branches from a tree to let the doors open. The captain had been determined to get us



ashore and had rather overdone it! In due course we were able to disembark dryshod but the LST remained high and dry until more than a week later, when there was an exceptionally high tide."

The Beach Maintenance Areas.

The operations of the Beach Groups in the two Beach Maintenance Areas are described in detail in the article *Indian Beach Groups in the Landings in Malaya* by Colonel DW Price CBE and Colonel RH Robertson, commanding 41 and 46 Beach Groups respectively. Both were Sappers and their article was published in the RE Journal in December 1947.

The factors contributing to increase the difficulties in the Morib beach area were fully reported by Colonel Robertson in the article. In the first place, although it had been realised that the country was much intersected by drainage ditches and that all roads were bounded by these ditches, the impracticability of getting vehicles off the road had not been fully appreciated. Thus the area selected for de-waterproofing vehicles was in fact quite inaccessible to them, being separated from the road by a broad, boggy ditch and a water-pipeline raised a foot off the ground. All vehicles, therefore, which crossed the beach queued up along the only road for de-waterproofing, causing inevitable congestion. An already difficult problem of traffic congestion was further aggravated by the fact that not only was it impossible to get off the road but in some places the verge was so soggy that vehicles and tanks running into it at once got bogged, further blocking the road.

Capt Feather's account resumes: "A quick recce was made of the area between the shoreline and the coast road, which was to be my particular responsibility, ie from Rest House Road to Potter's Bar. All the roads seemed to be in reasonable condition. The short road became known as the Rest House Road and was the obvious choice for the quickest initial exit and a convenient open-sided store alongside the road became the platoon's base for the duration. The Beach Group Commander came to occupy the Rest House nearby so information on the beach conditions and quantity of traffic to be expected was readily available. The Group HQ was also not far away in the Nunnery." After describing another reconnaissance of the roads which revealed a potential snag in two swampy areas, he continued: "Meanwhile the problem of tracked vehicles arose. It was essential to keep them off the Sommerfeld track and in any case to avoid the two bends. A straight run for them was defined across the swampy ground which unfortunately could not avoid a small pond. This was a basin approximately 30ft across by 6ft deep with 3ft of water concentrated in a sump in the bottom. It happened that a DUKW had jettisoned some of its load of Sommerfeld track nearby and several coils were surreptitiously dumped in the bottom of the pond, providing an excellent grip for lightweight tracked vehicles. All went well until a squadron of tanks arrived. All got through until the last one, at which point a brigadier turned up, becoming increasingly irate, and a cheerful shout from an

anonymous bystander did not help. 'What's the matter, Sir, won't it float?' It got out eventually and that was the only incident I can recall, otherwise with Sommerfeld track and corduroy of 5in timber ballies this route survived our operation. My main recollection was of having virtually no sleep for the first five days. My routine was a continuous round of inspection, carrying out maintenance tasks and organising material when and where required. Maj Preston (OC 24 Company) would turn up, invariably in the middle of the night when morale was low, with the exhortation 'Keep at it'. He obviously suffered from insomnia. I think we were lucky - the rest of the Company had far worse road conditions to deal with in both the White Beach (Henwood and his Sikhs) and the Preston Circus areas (the rest of the company)."

Where the roads broke up, they were repaired by cutting out the bad patch and filling it with stone or by laying corduroy of rubber logs with broken stone and PBS surface. Broken haunches were repaired by filling with stone and revetting. Despite all the problems encountered, however, 46 Beach Group landed a total of 42,651 personnel, 3968 vehicles and a daily average of 700 tons of stores in the eighteen days since D Day. The 1000 tons a day figure was passed on D+12. There is no doubt that the success of the landings and the subsequent build-up in the BMA would not have been possible without the heroic efforts of the Sappers involved. This was recognised by the following tribute in *Loud and Clear*, the daily news sheet produced by HQ 46 Beach Group:

"Monday, 17th September 1945.

NAVY ARMY AND AIR FORCE "E" PENNANT GOES TO SAPPERS.

Comd brings to attention of the Group the excellent maintenance on circuit and roads in the BMA by Messrs PRESTON LTD, Plumbers and Sanitary Engrs and now, by mayoral warrant Borough Surveyors. 'E' flag, in this case says Comd, will be a special humdinger with crossed sledge-hammers and a circlet of rubber leaves. It is particularly difficult to see what the Sappers are doing since most of it is underfoot but the fact that there is an underfoot in the borough at all is entirely due to unrelenting 24 hours a day maintenance."

The companies of 629 ATE worked initially on a variety of tasks in the Port Dickson BMA. The main problem was drainage of the area between the beaches and the road running parallel to them, and 200 yards inland, where the Japanese had allowed the drains to silt up and their outfalls on to the beach to get blocked. Rain and the heavy traffic turned it into a morass. Eventually the area started to benefit from improvements to the drainage, and it was possible to proceed with road building on a methodical basis. After a few days of working at Port Dickson, 485 Company moved over to Morib to assist the Beach Group there.

The Recovery of Singapore and Southern Malaya.

This operation was accomplished without opposition while 34 Corps was landing further north at Morib and Port Dickson. 5 Ind Div under Maj Gen EC Mansergh was originally to have been a follow-up formation to 23 and 25 Divs,

but once the Japanese had surrendered it was diverted to Singapore, as already described. The division sailed from Rangoon on 27th August 1945 when it was still not certain whether the Japanese troops on Singapore Island would obey the order from Tokyo and lay down their arms. On 3rd September when the convoy was off Penang, 9 Brigade was detached in case its services were needed. Some Royal Marines had already disembarked, however, and consequently 9 Brigade followed the rest of the division southwards.

In his book *The Indian Engineers 1939-1947*, Lt Col ECW Sandes outlines the unconditional terms of surrender of the Japanese garrison of Singapore and South Malaya and goes on to describe the unopposed landing of 5 Div under the guns of HMS *Sussex* on the morning of 5th September 1945 (See Map of Singapore page 262). Fully armed and prepared to fight, two battalions of 123 Brigade landed. However, the terms of the surrender were obeyed to the letter and there was no resistance. The infantry fanned out from the docks to occupy all the key positions such as arsenals, airfields, the railway terminus, and camps. 161 Brigade followed and advanced across the island to the naval base on the northern shore and the causeway linking it to the mainland. The Japanese garrison of Singapore of 35,000 men had crossed the causeway during the night in accordance with the terms of the surrender and were concentrated into collection areas on the mainland pending their removal. A major task for the 5th Divisional Engineers and for the 15 Corps Troops Engineers which followed them was the rapid construction of barbed wire enclosures to hold thousands of Surrendered Japanese Personnel.

As soon as the division began to disembark, some officers made their way to the Changi prisoner of war camp and civilian internees camp. They were appalled by the terrible conditions suffered by the PoWs and internees, and supplies were rushed immediately to these camps. The seriously ill were evacuated to hospital or hospital ships and the remainder clothed and fed. Sandes describes how, although emaciated and dressed in rags, and apparently dazed and speaking little of their horrifying experiences, their spirit was not broken. He recounts how some of the Indian soldiers, for instance, mounted guards in their camps, armed only with sticks, and when a senior Allied officer approached they "presented arms" in a smart fashion. The privations suffered by these PoWs and internees have been well-described elsewhere. The Bombay Sappers had lost two HQ units and five companies in Malaya in 1942 (Chapter 13), and between September and December 1945 no less than 17 British officers and 1143 Indian ranks, mostly from Malaya, arrived in Kirkee from PoW camps. The recovery and welfare of the former PoWs and internees was efficiently undertaken by an organisation called Release of Allied Prisoners of War and Internees (RAPWI).

On 12th September 1945 Admiral Lord Mountbatten, Supreme Allied Commander, South East Asia, accepted the formal surrender of the Japanese forces in South East Asia in the presence of senior officers of the British, Indian, United States, Australian, French, Dutch and Chinese forces.

Engineer Tasks in Singapore and South Malaya

Included in 5th Divisional Engineers was 20(RB)Indian Field Company, commanded by Maj EC Fisher RE. Antony Brett-James in his history of 5 Ind Div, *Ball of Fire*, relates how "the Sappers and Miners had many problems to face. The water supply was improved, public utilities repaired and reconnaissances made of store dumps. In South Malaya communications were restored and airfields repaired. Drains were cleared, anti-tank ditches and potholes filled in, bridges strengthened or replaced, and road-blocks removed. Classification signs were erected on bridges. Saw mills and quarries in Southern Johore were reconnoitred. All bridges for the first 150 miles from Singapore to Malacca had to be replaced. At night, while the military police closed the road, a platoon or two of Sappers were hastily stripping an old timber bridge and putting up a Bailey bridge by the glare of headlights." As time passed, the engineer units continued to improve accommodation and communications. It was not long, however, before the division became aware that they were required elsewhere.

Two months after their arrival in Singapore, at the beginning of November, 20 Company was the first unit of the Divisional Engineers to arrive in Sourabaya in Java with 9 Brigade. Their subsequent activities are described in Chapter 24.

The Sappers in North and Central Malaya

During the events described above, the formations which had landed further north at Morib and Port Dickson had been busy implementing the 34 Corps plan. Initially development of exit routes from the beaches and the preparation and repair of routes inland were the tasks of the Divisional Engineers of both 23 and 25 Divs. As 23 Div moved inland from Morib and Port Dickson, its Divisional Engineers became widely dispersed, each field company staying with its affiliated brigade. 91 Company, with 37 Brigade, moved to Kuala Pilah, east of Seremban and afterwards, passing through Segamat, built a 140ft DS Bailey bridge between Segamat and Kluang, on the road leading to Singapore. However, only ten days after 23 Div had landed in Malaya, it was told it was to be transferred to Java in the NEI. 91 Company and the divisional field park company sailed from Port Dickson with 37 Brigade in the middle of October. Their subsequent activities are described Chapter 24. The re-embarkation of 23 Div from Port Dickson provided an extra and unwelcome burden for 41 Beach Group.

Meanwhile, "Langatforce", from 25 Div's 51 Brigade, landed as planned and occupied Klang in the early afternoon of D Day. On the same day, 51 Brigade reached Port Swettenham and secured the Buaya crossing. 53 Brigade concentrated at Banting as planned. 74 Brigade concentrated in divisional reserve on Kelanang airfield. The airfield was guarded by 100 Japanese who handed over correctly without incident. On the following day, 25 Div moved forward without incidents in its advance to Kuala Lumpur. Difficulty was experienced

in getting tanks across to Klang, from which they were to take part in a ceremonial march into Kuala Lumpur. The timber trestle bridge over the tidal Sungei Klang was only Class 4 and although one tank was got across the railway bridge on a flat, this method was considered too great a threat to railway communications and was forbidden. 93 Company constructed a Class 40 Bailey pontoon ferry. Unfortunately no motor tugs were available and only 22HP outboard motors. These were really intended for use only with assault boats and were also notoriously unreliable and this factor coupled with the strong tidal flow prevented the company from getting more than one tank across, although this problem was solved subsequently. As described earlier, Lt John Moss had successfully completed his special mission with the Gurkhas after landing at Morib. He continues his tale: "My next recollection - it must have been some hours later - was of the CRE telling me to take the Divisional bridging equipment as soon as it was assembled after landing and station it - regardless of orders from elsewhere - on the racecourse at Kuala Lumpur in readiness to move up the road to Siam, where the Japanese had not formally given up fighting. This order was carried out to the letter and without incident save for one moment of panic as we were approaching the centre of Kuala Lumpur and came under (we thought) heavy machine-gun fire. Fortunately this turned out to be Chinese crackers let off to celebrate our arrival! The formal entry into Kuala Lumpur came a few days later and was followed by a 'Victory Parade' in which the Sikh Platoon participated.

"The racecourse was a good place to park the bridging lorries and the grandstand a convenient and dry billet for the troops but the whole place was still occupied by Japs. Their officers were billeted in the plush houses all round the racecourse and they were still armed. I did not like this much. We disarmed those in the nearest houses but perforce had to leave the rest as they were. Most of them pulled out during the night - after which their houses were looted noisily by the local Chinese.

"Meantime the bulk of 93 Company was, I understand, engaged in port operations of one sort or another in Port Swettenham and Klang, but I was ordered to go with my platoon up the road north, past the Slim river - still showing the debris of the 1942 defeat - to Ipoh and then Butterworth." In fact, before reaching Butterworth another platoon strengthened a Class 9 trestle bridge at Tanjong Malim and the route from Tapah to Ipoh was reconnoitred. At Butterworth the Company was reunited and put to tidying up after the Japanese, improving barrack accommodation left by them and undertaking other, not too arduous, good works.

The refurbishing of a former Japanese camp for a British battalion was memorable only because the place stank to high heaven as the Japanese-built main drain was clogged and had to be flushed out using a No 4 pumping set. The rest of the company was engaged on bridge repairs on the road north, and other camp construction tasks until mid-October when it continued its move

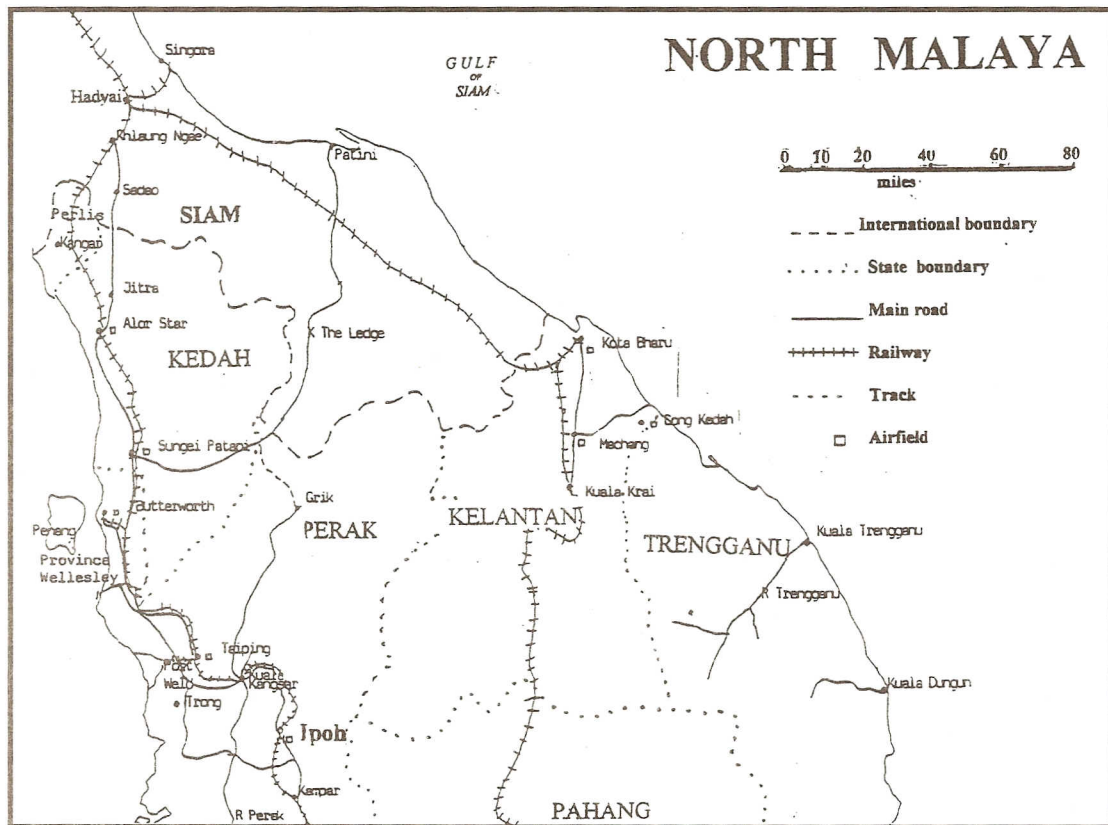
north, most of it to Alor Star where one of the platoons started work on a 180ft DD Bailey bridge on the site of a demolished RC bridge over the Sungei Kedah. The company was to remain in Alor Star, accommodated on the airfield, until February 1946 and during that time they were occupied on a variety of tasks. These ranged from improving their accommodation (infested by feral cats), assisting two Dutch battalions (being acclimatised en route to the NEI) with their accommodation problems and constructing a sawmill, to providing technical support to the Alor Star waterworks and power station against the threat of a general strike. They also carried out the demolition of a Japanese memorial at the Sungei Kedah bridge. Maj Usher recalls a memorable occasion in Alor Star when the Sultan of Kedah invited all the officers of 74 Brigade (to which 93 Company was affiliated) to a magnificent curry banquet in his palace.

On his way north with his Sikh platoon, John Moss recalls that they spent two nights at Gurun where there was another former British defence line abandoned in 1942 and refurbished by the Japanese, presumably against our return. In John Moss's opinion it could have been easily turned from right or left by troops experienced in jungle warfare. Once in Kedah State, he also visited the failed Jitra position and saw the hulks of Japanese ships abandoned off Singora across the Siam border after the landings in 1942. The Japanese were still in occupation, were fully armed and looked very surly.

It had been appreciated that restoration and improvement of communications was a vital task for the Sappers in Malaya once they had landed. Since making their initial landings at Kota Baru in 1942, the Japanese had dismantled large sections of the railway line between Kuala Krai, Kuala Lipis and Jerantut which had formed a connection with the southern States. A road was needed to replace this railway, and the railway down the western side of Malaya had to be reopened where it had been heavily damaged by Allied air attacks prior to the end of the war. Somehow, rice from Siam had to be transported to feed the population of Malaya. The east coast road from Kota Baru to Kuantan needed to be brought up to fair weather Class 9 occasional two-way standard and a Class 40 road from Kuala Lumpur to Kuantan was also required. This project was to form a major Sapper task from early 1946 onwards and was the start of the East Coast Highway. Bombay Sapper units were to play a full part in this, and in another major task, the construction of a semi-permanent cantonment for one brigade group in Taiping.

Back at Morib 24 Field Company continued working in the BMA until the end of October when it came under command of CRE 101 Indian Works. Leaving a platoon behind on road maintenance in the BMA until it closed on 5th November 1945, the company moved to Klang near Port Swettenham, where its tasks included construction work in FSD Klang and a stores dump for DCRE 379 Works Section, and maintenance and repair of the airfield. Less than two weeks later the company came under command of 50 Tank Brigade and was responsible for engineering works in north Johore, the main tasks being roads

NORTH MALAYA



and bridges, and moved to Muar and Segamat on the Kuala Lumpur -Singapore road at the end of November. This phase did not last long either, as after a period of training the company moved to Singapore Transit Camp on its way to join 458 Forward Airfields Engineers in Batavia. Like those of 91 Company, its subsequent activities are described in Chapter 24.

Nothing is known of the movements of 489 Independent Stores Platoon once the BMA at Morib had closed, but it is likely that it returned to Kirkee for disbandment.

Capt Feather became 2IC of 24 Company and recalled that whilst in Segamat they witnessed the disbandment parade of some 800 Chinese guerillas who had been working with Force 136 (the covert force of British intelligence operators parachuted into Malaya to organise anti-Japanese guerillas). "The guerillas were to hand in their arms and it was a little uncertain what might happen. However, all went well but the nondescript collection of old weapons suggested that more modern, better weapons had been hidden elsewhere. At least the Intelligence Officer thought so and invited us to go on a number of abortive search expeditions into the jungle."

Maj Usher of 93 Company had witnessed a similar disbandment parade of Chinese Communist guerillas further north and commented "they looked distinctly sinister in their caps bearing the three red stars, and even then we felt we hadn't seen the end of the story."

The Divisional Engineers of 25 Div were not left to carry the burden of engineer tasks in Malaya unaided. Engineer units of all sorts had landed over the beaches and at Singapore and flooded into the country. Among them were the units comprising 472 AGRE which had been re-numbered from 17 AGRE soon after it landed. One of these was 629 Army Troops Engineers, consisting of 30 Field Company and 324 Field Park Company, (both previously in 36 Div which had British infantry but predominately Indian Sappers) and 485 Field Company. It was thus an all-Bombay unit, commanded by Lt Col PM Bennett.

The companies worked in the two BMAs until the end of September and early October when they were separated. 30 and 324 Companies went north to Alor Star and 485 Company to Seremban, where it provided a military presence and supervised the handing-in of arms by the Malayan People's Anti-Japanese Army or guerillas. Although 324 Company remained in Alor Star for a month carrying out trades training, its Field Platoon moved to Sadao in Siam to carry out bridge repairs with a platoon of 30 Company between there and Hadyai (also in Siam). These two platoons also built a 40ft Bailey bridge just north of Sadao. Hadyai was the base for another platoon of 30 Company which was operating a quarry, assisted by Japanese labour, and for a workshop detachment of 324 Company which was preparing railway wheels for jeeps and repaired railway locomotives and wagons. During the last two weeks of November the

two companies moved by train - the only suitable means of transport due to lack of roads in the area - to Surat Thani, in Siam. Here the two companies, assisted by a Japanese railway engineer battalion, constructed a train ferry which made possible the restoration of the western rail link between Siam and Malaya. This project is described in detail in Chapter 22, but it permitted not only the recovery of the Malay Railways rolling stock which the Japanese had moved into Siam to move troops rapidly in the event of an Allied attack, but also the import of much-needed rice for the civil population. The two companies remained in Siam until the ferry was completed at the beginning of February 1946, when 30 Company moved to Ipoh for a period of rehabilitation and refitting, interrupted by the need to take over the running of the railway workshops at Ipoh when the staff were out on strike. 324 Company moved to Taiping, taking over the lines and commitments of another field park company. They were joined there by 30 Company shortly afterwards. Maj Fradgley remembers that they were kept busy on road repair, Bailey bridging and ferrying, the operation of a quarry with Japanese labour, and construction work in the Taiping cantonment.

Taiping had also been the base of 485 Company when they moved from Seremban and they were then employed on road repair. Their next move was to Hadyai where they once more came under command of Lt Col Bennett of 629 ATE. There they took charge of a Japanese engineer battalion repairing and upgrading the roads and bridges between Hadyai and the Malayan border. They subsequently returned to Malaya and some time later were at Tampin near Malacca, where they constructed a Double Triple Bailey bridge. By the end of 1946 the Company was in Kuala Lumpur and in March 1947 it returned to India for disbandment.

The East Coast Road project was started early in 1946 by 25 Divisional Engineers. Although 25 Div received orders to return to India at about this time, this did not include the Divisional Engineers, who remained in Malaya. Towards the end of January 1946 93 Company left Alor Star and moved south to Bentong, north-east of Kuala Lumpur. They had been allotted the task of creating a Class 40 route from Kuala Lumpur to Temerloh, mainly by replacement of timber trestle bridges by Bailey bridges. Additionally, they were responsible for keeping open the road Bentong - Raub - Jeranut ferry. Thence to Kuantan was the responsibility of another field company. Other units of 25 Divisional Engineers were responsible for the East Coast road from Kuala Dungun to Kluang, whilst Corps Engineers were allotted the road from Kuala Dungun to Kota Baru. The specification for this road was raised to "Reasonable Class 9 all-weather" standard shortly afterwards. The control of the road project was taken over by 472 AGRE in June 1946.

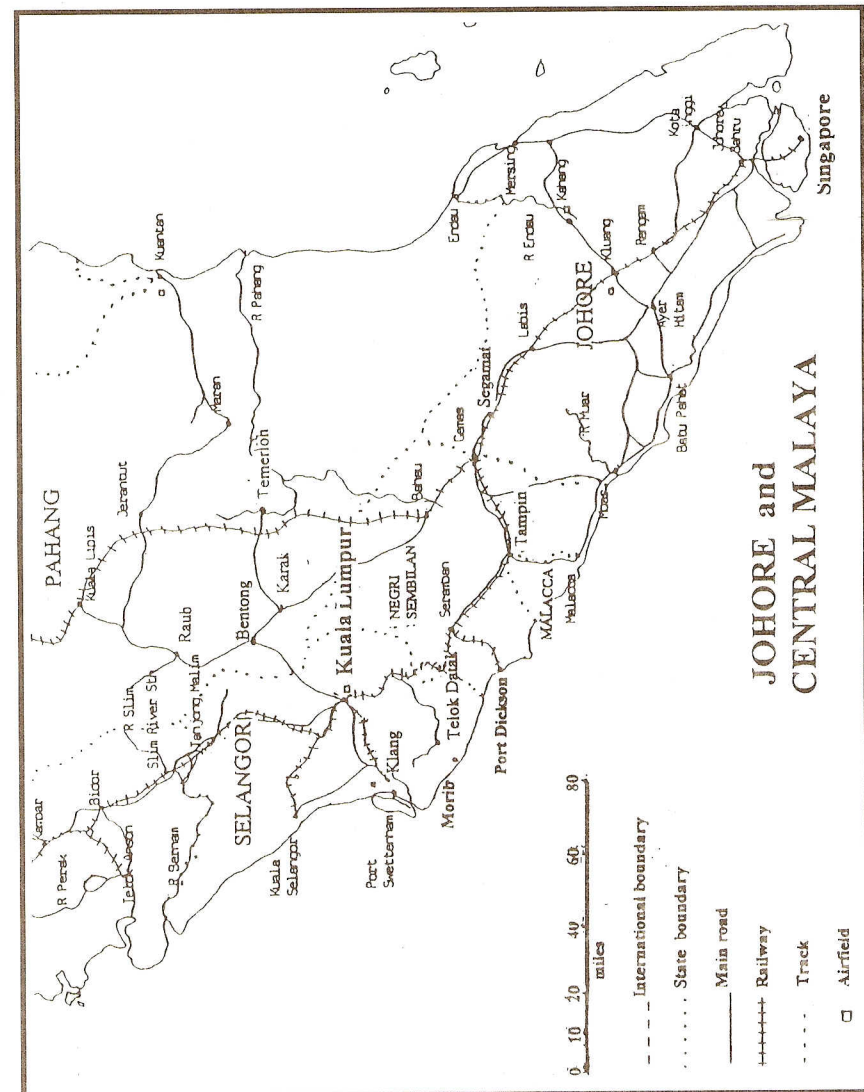
93 Company had few problems with their bridging on the Kuala Lumpur - Temerloh road. Maj Usher recalls that "the drill was to overbridge to C19 using grillage behind the abutments and ramps, thus enabling the timber bridge to be dismantled and the abutments strengthened. When this was done the Bailey

bridge was jacked down and the ramps removed, A Bit-hess wearing-strip was provided at all bridges and the route remained C19 until all work had been completed. In general, except at Karak, where the road crossed the Sungei Telemong, the work proceeded smoothly and without incidents. There was one occasion when the BOR driver of a Diamond T tank transporter got lost and ended up at Temerloh. Luckily he didn't have a tank on board and no harm was done.

"At Karak the pre-war bridge had been blown at the time of the Japanese invasion and the Japanese had replaced it with a timber trestle bridge of six spans. The Sungei Telemong was fast-flowing and liable to sudden spates. Moreover, it was too wide to permit a single-span C1 40 Bailey bridge and on 24 May a C1 9 Bailey overbridge was completed, allowing the route to remain open. The original plan was for a two-span bridge on a central piled pier but it proved impossible to drive piles into the hard river-bed which may have contained concrete from the demolished bridge but was probably bedrock. Plans to lay a concrete foundation inside a sandbag cofferdam came to nothing as another flood swept all away." The PWD Chief Engineer in Kuala Lumpur eventually ordered 6ft diameter concrete pipes to act as pier caissons. These arrived in mid-July and the platoon working on the bridge spent the next two weeks blasting the river-bed. Even so, one caisson proved difficult to position and the bridge was not completed until late in August.

Meanwhile the rest of the Company had moved to Kuala Dungun and carried on working on the East Coast road until relieved by 30 Company. There was wonderful seabathing from the sandy beaches near Kuala Dungun, but sharks came very close inshore and sentries with loaded rifles were always posted ready to scare them off. The East Coast road posed few problems. Japanese labour worked the quarries and tipper lorries transported the stone to the work-sites. A few short-span Bailey bridges were built but most of the work consisted of dozing and grading on the road alignment and providing soling and surfacing using road rollers. They were relieved by 30 Company, then moved across to Taiping and lived in the camp they were constructing. at Kemunting, where there were a number of old Chinese cemeteries. One evening Maj Usher was approached by a Sikh NCO complaining about ghosts in their lines. Not being sure how to deal with problems of the supernatural, he consulted the subedar. "Ghosts, are there?" said Sub Ananda Jagtap, "I'll give them ghosts!" and Maj Usher heard no more of them.

30 Company had moved from Taiping in July 1946, taking on bridge and culvert construction on the East Coast road between Tregganu and Kota Baru. Several changes had taken place in the Company since their return from Surat Thani. Maj Fradgley was repatriated on PYTHON in February and was succeeded as OC by Maj Young, who in turn was succeeded by Maj McNaughton just before the move to the east coast. In July Lt Rau was promoted to captain and after a short stay at HQ 629 ATE became 2IC of 485 Company. 30 Company



were not employed for long on the section of the East Coast road they took over from 93 Company. Maj MM Nath took over from Maj McNaughton early in October and had the task of moving the Company to Rangoon in mid-November 1946. Nath was appointed Deputy Commandant at Kirkee before the Company returned to India in August 1947 just before Independence. At some time in 1947 the Company became 30 Army Troops Company and was disbanded later that year as 30 Construction Company.

After the return of 25 Div (less its Sappers) to India to disband, their divisional area was taken over by 7 Ind Div which had moved down from Siam. The erstwhile 25 Divisional Engineers came under DCE 145 Works. When 93 Company reached Taiping after handing over its East Coast road responsibilities to 30 Company, it was engaged on construction work in the camp cantonment. In December 1946 Maj Usher handed over to Maj Pilditch and was repatriated on PYTHON.

During 1947 the Indian field engineer units were steadily withdrawn and by September there was none left in Malaya. Their contribution to the restoration of road and rail communications in Malaya was splendid and should never be forgotten. The units of the Royal Bombay Sappers and Miners played their full part in that restoration.

OFFICERS VCOs BWOs & BNCOs WHO SERVED IN RBS&M UNITS IN MALAYA 1945 - 1947

HQ 5 Div Engineers

CRE	Lt Col RC Orgill
FE1	Maj W Speir
Cpts	LJM McSweeney (Adj), Capt PF Holt (FE 2)
IO	Lt SR Palmer

629 Army Troops Engineers

CRE	Lt Cols PM Bennett, DH Boydell
Majs	G Mackay, T Duncan, EV Collins
Cpts	CP McNaughton, CG Dey, ED Wheeler, RH Marshall, WP McLeish, RM Rau IE
Lts	D Cox, DJF Downie

20 Field Company

Maj	EC Fisher
Cpts	DA Hartley, JP Corking
Lts	JP Corking, JP Osborne, GH Hambridge, Pearson
CSM	Mann
Jems	Laxman Dhanaute, Mohd Sadiq, Sarwan Singh

24 Field Company

Maj	JH Preston
Cpts	Spencer, I Feather
Lts	Downie, I Feather, Heywood, Lindsay
CSM	Williams
Sgt	Jones

30 Field Company

Maj	AN Fradgley, DS Young MC, CP McNaughton
Cpts	MM Nath
Lts	PJK Ellison, DS Young MC
Subedar	Egan, RM Rau IE, Felkin
	Ghulam Rasul

91 Field Company

Maj	JS Beddows
Capt	RRBW Pitt Chambers
Lts	HA Mavor, JR Hudson, Chapman, Hammett, Cox
CSM	Farrow
Jem	Udham Singh

93 Field Company

Maj	ID Usher, PM Pilditch
Cpts	W Guthrie, P Rumsey, JR Moss
Lts	JR Moss, E Bewlay, C Hooper, Scott
MO (Capt)	Chowdry
CSMs	Wren, Wilder, White
Sgt	Coombes
Subs	Raoji Ranade, Ananda Jagtap
Jems	Gurmukh Singh, Ganpat Sable, Mohd Khan
	Bajirao Bhosle

485 Field Company

Maj	Smith, SH Clark, Fleming, T Duncan
Cpts	SH Clark, RM Rau IE, DH Wheeler
Lt	GS Richardson, EJ Payne, ERH Selley

324 Field Park Company

Maj	PM Pilditch
Cpts	CP McNaughton, ED Jackson, DH Wheeler
Lts	ED Jackson, PAT Wiggins

COMPILER'S NOTES ON SOURCES.

This chapter has been compiled from the following sources:-

The Indian Engineers 1930-1947 by Lt Col EWC Sandes DSO MC RE
Ball of Fire - The History of the 5th Indian Division by Antony Brett-James.
 War diaries of HQ 5 Div Engrs, 20, 24, 30, 91, 93 and 485 Field Companies, 324 Field Park Company.

Indian Beach Groups in the landings in Malaya by Col DW Price CBE and Col JRH Robertson, published in the Royal Engineers Journal in December 1947.

Adventures in Malaya and Thailand by Maj Gen RM Rau AVSM

Personal memories of the following officers:-

Colonel SH Clark OBE DL	485 Field Company
Capt I Feather	24 Field Company
Maj AN Fradgley MBE	30 Field Company
Capt JR Moss CB	93 Field Company
Maj ID Usher	93 Field Company

CHAPTER TWENTY-TWO

SIAM, FRENCH INDOCHINA AND NORTH BORNEO 1945-1946

Compiled by Major DS Young MC

Background

As the Japanese Imperial Army faced defeat in Burma, the Allies were planning the tasks ahead. Many units were withdrawn from Burma to India to prepare for the opposed landings expected in Malaya. At the same time preparations were being made for other tasks in the event of a Japanese surrender. These could be summarised as follows:-

- to reach and free Allied prisoners of war and civilian internees held not only in Malaya but also in Siam (Thailand) and French IndoChina (Vietnam);

- to accept the surrender of Japanese forces and to supervise the laying-down of their arms; and

- to ensure law and order and provide a provisional government until such time as a civilian authority could be established.

While these were the broad outlines of the undertakings expected by the Allied forces, the local circumstances varied enormously and the conditions in Siam, for example, were very different from those in IndoChina. For the Sappers, their role was to move with the Divisions and Brigades as required and to be ready for anything from road repairs, bridging and water-supply to bomb disposal, providing running water, power supplies or port facilities. As will be seen from the narrative which follows, these tasks varied from the boring and routine to the dangerous and exciting. As someone remarked, "isn't that what being a Sapper is all about?"

The planning and organisation were extremely uncertain, even haphazard, but they were uncertain and changing times. For instance, nobody on the ground anticipated that the atom bombs would be dropped and the Emperor would agree to a surrender, nor that the Japanese Army would comply so completely with the terms of the surrender. It made the task much easier; it also meant that many operations planned for the opposed occupation of territory took place without opposition.

The RBS&M units involved are listed below. It will be seen that some units were in more than one country during these post-surrender months. At the same time there was a scaling-down of units as personnel went on release, discharge or leave, so there were postings and changes of personnel which did not make for easy or smooth operations in some cases.

Siam

SIAM	HQ 457 Forward Airfield Engineers 402 Field Company 30 Field Company) 485 Field Company) 629 Army Troops Engineers 324 Field Park Company)
INDOCHINA	HQ 20 Indian Divisional Engineers 92 Field Company 481 Field Company
NORTH BORNEO	92 Field Company

An attempt will be made to take each of these countries one by one and describe the involvement of the units and the tasks they carried out in each country.

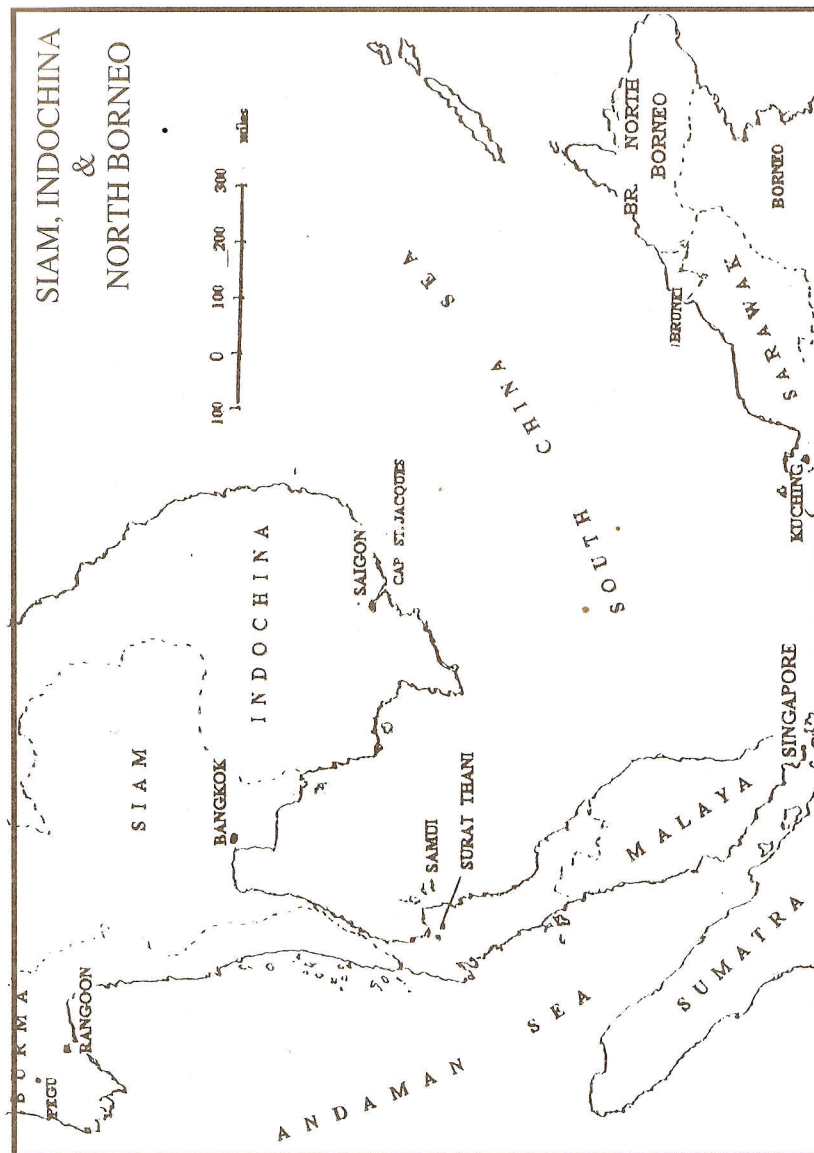
SIAM

The operations in Siam can be divided into two parts. In the Bangkok area were HQ 457 Forward Airfield Engineers with 402 Field Company. They were in support of 7th Indian Division who like them had been in the Pegu area of southern Burma as the Burma campaign drew to a close. The tasks in the Bangkok area were to rescue and evacuate 20,000 Allied PoWs and internees; to round up and disarm 113,000 Japanese troops; and to secure, repair and maintain the Don Muang airfield outside Bangkok in order to provide smooth facilities for the refuelling of aircraft transporting and maintaining 20 Ind Div and others through Bangkok to IndoChina.

Maj OMR Arnell (OC 402 Company) accompanied by Capt WF Faulds, his 2IC, flew to Bangkok on 8th October 1945 to meet the CRE 7 Ind Div and prepare the work to be done by the company, which followed on 16th October. In addition to helping with the surrender of Japanese forces in the Bangkok area, their main tasks were maintenance and improvement of the Don Muang airfield near the city and minor repairs and maintenance of the roads around that area. With the airfield in steady use, this was a pretty continuous operation.

An additional task during this period was the provision of a floating jetty on the Chaophraya River near Bangkok to allow ocean-going vessels to unload their cargoes. A very good jetty was built, though the ceremonial demonstration for the Admiral of SEAC was was something of a disaster as the Japanese craft at the floating end was badly moored the night before and got jammed before sinking. Another marine task was the maintenance of Paknam Dock, which was carried out successfully.

It was on 11 January 1946 that 22 Japanese Admirals and Generals surrendered their swords in Bangkok, while similar ceremonies were held in outlying stations.



For 402 Company, their work continued until the end of March when the company sailed for Singapore. Maj Arnell left the company on 31 March for UK on LILOP and Capt Howard Bristow took over command for their return to India. He was assisted in getting the company ready for this by Lt Jerry Lyons, who went to North Malaya once the company had embarked. They sailed from Singapore on 11 April 1946 and reached Calcutta after a crowded voyage. They arrived in Kirkee by train on 28th April and three months later, on 31st July 1946, they were disbanded.

In Southern Siam the main tasks were:

- to provide communications for the evacuation of former PoWs and internees back to Malaya;

- to deliver food supplies, mainly rice, from Siam to Malaya which was desperately short of food at the end of hostilities;

- to return to Malaya the railway wagons taken to Siam by the Japanese to enable them to move reinforcements to Malaya in the event of an Allied landing.

There had been many disruptions of communications, but the most formidable was at a place called Surat Thani, where a large railway bridge had been badly damaged by Allied bombing. The concentration of effort was to provide an alternative crossing of the Ta-Pi river. To replace the bridge itself was beyond the resources of field units. The silty bottom of the river made piled piers an uncertain solution, and anyhow a low-level bridge of this type would impede or prevent river traffic. A floating bridge was considered unsafe in view of the strong current flowing in the river.

With the assistance of Lt Col DC Merry, a Transportation staff officer from Singapore, Maj AN Fradgley (OC 30 Company) reconnoitred the site and decided on a plan for a railway-wagon ferry some 100yds upstream from the destroyed bridge. This meant providing new approaches to the river banks and landing bays on each side. The half-floating piers and the raft were made up of double-single Bailey bridging with the terminals provided by bankseats founded on 12in round piles. In all this work, in addition to 30 and 324 Companies a great deal of the labour was provided by 11 Japanese Railway Regiment, comprising some 1000 men, who had been keeping the railway running before the surrender. As well as being well-trained in railway engineering work, they had a good supply of tools and equipment and an ample supply of timber, assembled by them in the hope of providing a by-pass to the damaged bridge.

Lt Col Peter Bennett, CRE 629 Army Troops Engineers, with Maj Fradgley and Maj Pilditch, OC 324 Company, provided a good management team and the two Bombay Sapper units worked well together. Both had been in 36 Divisional Engineers previously and, after landing in Malaya in September, had carried out bridge repairs between Sadao and Hadyai in southern Siam. On the rail-ferry project 324 Company provided much needed workshop facilities. The early reconnaissance started in October 1945, with the construction of a

camp by the Japanese being completed ready for the two Sapper companies to move in and start work in mid-November. The ferry was completed and running by mid-February 1946. The opening ceremony was performed by the Governor of Bandon Province on 1st February following a successful trial during the last week of January. The work completed, 30 Company returned to Malaya and were based at Ipoh, while 324 Company settled in at Taiping (where the abiding memory was that it rained every day at 4.0 pm).

Like 30 & 324 Companies, 485 Field Company had landed in in Malaya at Port Dickson in September 1945 and eventually moved from Taiping to Hadyai in southern Siam. Here it took command of a Japanese engineer battalion to work on repair and upgrading of roads and bridges between Hadyai and the Malayan border some 35 miles to the south. The company subsequently returned to Malaya as part of 629 Army Troops Engineers.

Life in Siam had not been without its lighter moments. The local officials, from the Governor of the province downwards, tried to make the Allies welcome and to provide some leisure entertainment. The officers in particular enjoyed hospitality at various receptions, and were once taken to the island of Samui, now a well-known resort for tourists on package holidays. At that time the local speciality was freshly-gathered oysters, to be eaten on arrival.

INDOCHINA

With the occupation of Bangkok and the facilities at Don Muang airport in working order, communications to Saigon (now Ho Chi Min City) were on a secure basis. 20 Indian Division under Maj Gen D Gracey were given the task of recovering and securing it and the surrounding country. Their job was to round up and disarm scattered Japanese forces before arranging their repatriation and to secure the various bases, stores, ports and airfields. It was not an easy role and as IndoChina was a French colony one that had some unexpected angles. For instance, English was not much understood nor were the French familiar with Indian troops. The indigenous Annamite population had expected to become independent when the Japanese surrendered, but instead found the Allies' presence was partly a holding operation until the French returned - something which many of the population did not want. For the Sapper units, having Lt Col RAG Binney as CRE was a great advantage as he was fluent in French. He had returned from leave on 27 August and flew to Saigon with Capt (later Maj) WL Lawler, Royal Australian Engineers, on 7 September to prepare for the arrival of his Sapper units. Binney was replaced within two months by Lt Col DR Guinness who was with the division for the remainder of its stay in IndoChina.

While the centre of Saigon was a beautifully laid-out city with boulevards, fine shops, modern buildings and gardens, close by in contrast was the Chinese-Annamite quarter crowded with 200,000 inhabitants. There was a similar contrast

between the welcome given to the Allies by the French on the one hand and the suspicion of the local population on the other. This was something the Sappers had to contend with in trying to carry out their tasks. It was, of course, the early signs of what eventually developed into a full-scale war in Vietnam, first as a struggle to be free of the French and then a civil war between the communist north and the non-communist south, into which the Americans were to be so disastrously drawn.

The Bombay Sapper units with the Division were 92 Field Company under Maj JH Clark MC and 481 Field Company under Maj JPA Jackson. 92 Company arrived at Saigon by ship on 7th October 1945 and 481 Company followed on 17th October. Two other Sapper companies (not RBS&M) were also involved in the Saigon operations, namely 422 Field Company which arrived by air on 29 September and 322 Field Park Company which arrived on 11th October and stayed in IndoChina until they handed over to French troops in January 1946.

In the resistance to the arrival of 20 Ind Div by the local population, all public services ceased to operate. Their restoration became a priority task for the Divisional Sappers. The job was made much harder because many of the population not only had arms but were in some cases led by fanatical Japanese officers who were not prepared to accept the surrender terms. Sniping, particularly at night, was fairly common at the start. In an attempt to provide some security, 92 Company who were guarding and operating wells for the provision of water supply, cleared the houses round the wells but unfortunately set fire to some thatched houses in the process, with resulting panic among the local people in that crowded area.

Apart from isolated incidents involving fanatics, most Japanese officers accepted the surrender terms and were obedient and efficient. A Japanese engineer regiment worked well with the British and Indian Engineer officers, according to Colonel RA Loomba, a Madras Sapper officer who was serving with one of the companies. Perhaps one of the most valuable contributions was made by the Australian, Maj WL Lawler RAE, an electrical engineer who was remarkable in his technical skills in getting every kind of broken-down installation working, but also did wonders with the French, Indian and Japanese who worked under him. These various works included repairing water-supply installations which had been damaged by American bombers, getting electricity generating stations working despite being fired on, and repairing the distribution cables after they had been cut by nationalist resistance groups.

One of the interesting jobs assigned to 92 Company was to arrange the internment of the Japanese on Cap St Jaques, a fortified headland at the mouth of the Saigon river. When a Sapper officer and a Staff officer went to reconnoitre the site, they were met by a Japanese delegation, headed by an Admiral, who entertained them to a sumptuous meal before showing them round. Unfortunately two bridges on the way to Cap St Jaques were destroyed by the local people,

and 92 Company had to repair these bridges. During the work they were accommodated in an hotel in style, never having known such luxury before. It has to be said that nevertheless they left their accommodation absolutely immaculate - of course.

From their arrival in October 1945 until January 1946, 481 Company were based in Thu Duc, outside Saigon, at first to secure the area, demolish ammunition dumps and form a firm base, and later to overhaul and renovate the water- supply system, which presented a number of problems. Their stay was punctuated from time to time by attacks by rebels using grenades and mortars. Although not excessively damaging, these were hazards which the company could have done without. One task constantly facing the company was that of repairing and improving the roads, as very little maintenance or repair had been done during the period of Japanese occupation. At the start of this work, road blocks had to be cleared and ditches filled in.

In December 1945, when 92 Company received orders to proceed to British North Borneo with one of the infantry battalions, 481 Company moved into Saigon and took over the duties of Garrison Engineers. They were to be based there until early in February 1946 when the French were in a position to take over responsibility. On 9th February 481 Company sailed for India, and arrived in Kirkee via Madras on 19th February. Immediately after their arrival the company started disbanding.

NORTH BORNEO

Shortly before 92 Company received orders to move to North Borneo, Maj JH Clark proceeded to UK on leave and Capt EP Linton was appointed officiating OC pending the arrival of Maj HE Allison, who joined the company in February 1946 after their arrival in North Borneo. They were there in support of 9/14 Punjab Regiment, a battalion which knew them well from the Burma campaign and were unstinting in their praise of the company, whom they described in their Regimental History as "magnificent". The 9/14 Punjabs were given the task of controlling and administering the Japanese in Borneo, setting them to work on various jobs to restore the area to good order. For the company there was always the routine engineering maintenance and repairs to be done, but certain additional tasks came their way too.

Two of these were to run a quarry and a sawmill, with the help of Japanese working-parties. The quarry provided the stone needed for the roadworks, whilst the timber was always in demand for repairs to rivercraft and the accommodation housing the units in Borneo. Kuching was the capital and the scene of much of the activity. Another assignment was to provide skilled help for the unloading of ships and the training of stevedores, winchmen and hatchmen. One colourful occasion during their stay which was not connected with their engineer role in Borneo was the ceremonial associated with the return of the Rajah of Sarawak,

and his subsequent ceding of the territory to the British Crown. This has been well-described in the History of 9/14 Punjab, who provided the main guard of honour to which a detachment of 92 Company was added and given pride of place. The reception given to the Rajah and Ranee by the local population was enthusiastic and left in no doubt the feelings of the people towards them. A further event witnessed was the visit of Lord Louis Mountbatten, the Supreme Commander South East Asia, who arrived on 22 April 1946 for a brief visit.

Shortly after this visit the company started preparing to return to India to disband. Their movement orders for this move were altered no less than 16 times. Changes to movement orders were not infrequent (mention of them appears in other chapters) but 16 on one move sounds like a record. The company eventually reached Madras on 8th June, then proceeded by special train to Nasik for deployment under 29 British Brigade as well as for well-earned leave in batches. Subsequently, the company was retained in the post-war Army, being re-numbered 22 Field Company. It had had a distinguished career whether in war or in their somewhat unorthodox activities in the months afterwards.

OFFICERS WHO SERVED IN RBS&M UNITS IN SIAM, INDOCHINA & NORTH BORNEO

HQ 457 Forward Airfield Engineers

Lt Col	PE Holmes
Majs	Kerridge, T Macdonald, Priestman
Cpts	BW Butler, SP Dickinson, JP Osborne, TL Satchwell, JC White
Lts	H Bristow, HT Easdale, G Hawdon, J Lyons, Searle

402 Field Company

Majs	OMR Arnwell, WE McDougall
Cpts	WR Faulds, AS Macdonald
Lts	H Bristow, AJ Burridge, DC Morris, JT Pears

HQ 20 Divisional Engineers

Lt Cols	RAG Binney, DR Guinness
Majs	LAW Jennings, MJ Prichard
Cpts	WL Lawler, TW Prentice, TDS Rowland
Lts	WR Ferris, SH Prickett

92 Field Company

Majs	JH Clark MC, EP Linton
Lts	RW Balston, BKSB Hartshorne, GR Lathbury

481 Field Company

Maj	JPA Jackson
Capt	Stagg
Lts	Bainbridge, Cochrane, Stevens.

A list of officers of HQ 629 Army Troops Engineers, 30 and 485 Field Companies and 324 Field Park Company is at the end of Chapter 21.

COMPILER'S NOTES ON SOURCES

This chapter has been compiled from information provided by the following sources:-

1. War diaries for the following units:-
HQ 457 Forward Airfield Engineers
402 Field Company
324 Field Park Company
HQ 20 Indian Division Engineers
92 Field Company
481 Field Company
2. Reports on the Surat Thani rail ferry in South Siam by Lt Col DC Merry and Maj AN Fradgley MBE
3. Chapters 9 and 10 of *The History of the 9/14 Punjab Regiment 1941-47* by Lt Col JR Booth DSO and Lt Col JB Hobbs DSO.
4. Chapter XIV of *The Indian Engineers 1939-1947* by Lt Col EWC Sandes.
5. An article *Sappers & Miners in Saigon* by Maj JH Clark MC from the RE Journal of September 1950.
6. Personal accounts from:-

Howard Bristow	402 Field Company
Walter Ferris	HQ 20 Indian Divisional Engineers
Steve Clark	485 Field Company
Walter F Faulds	402 Field Company
Maj Gen Madhav Rau AVSM)	both with 30 Field Company on
David Young)	Surat Thani rail ferry.

CHAPTER TWENTY-THREE

THE ANDAMANS AND NICOBARS

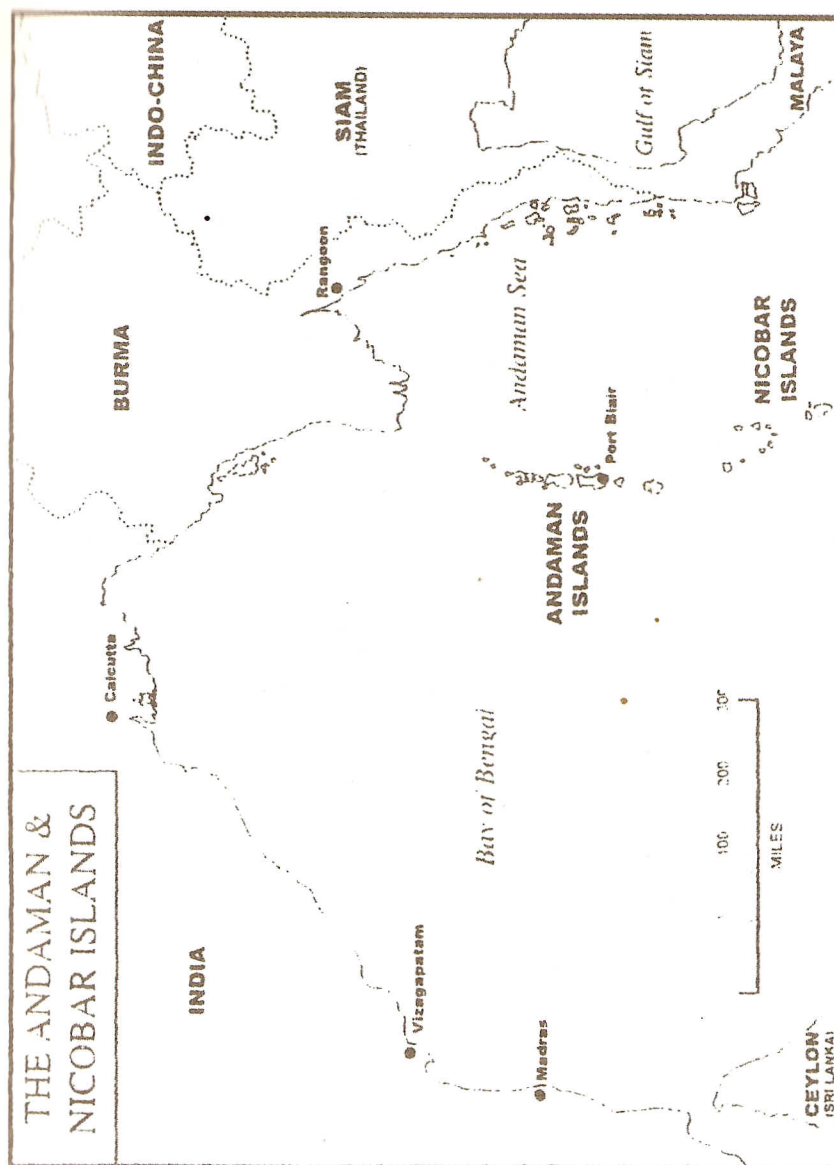
99 (RB) INDIAN FIELD COMPANY

Compiled by Lieutenant Colonel DL Jones

South-west of Rangoon, south-east of Calcutta and due east of Madras lie the Andaman Islands. Due south of them are the Nicobar Islands. These two groups of islands form a chain of 321 tropical islands running north and south down the eastern edge of the Bay of Bengal and separated from the western coast of Thailand and Malaya by the Andaman Sea. Only 38 of the islands are inhabited; the Nicobarese are of Mongoloid origin, whereas the Andamanese aboriginals are of the Negrito group, many of them hostile to strangers and dangerous. The Andamans consist of North, Middle and South Andaman, Baratury, Rutland and their offshore islets and Little Andaman. The only town is Port Blair on the south-east corner of South Andaman. The main islands in the Nicobars are Great Nicobar and Car Nicobar. The climate is tropical monsoon and the islands are densely forested, being a prime source of excellent hardwoods. Prior to 1942 the exploitation of these hardwood forests was a Government of India monopoly.

The main feature of the Andamans was the penal settlement on South Andaman. A jail was first built there in 1858 after the Indian Mutiny. In 1906 a large cellular jail of seven radial wings was built on Atlanta Point near Port Blair, which became the administrative centre for the islands. Many of the civilian officials and the small military garrison were accommodated on nearby Ross Island. A sentence of transportation to the Andamans was usually for 20 years or 25 for dacoits. However many convicts did not survive to complete their sentences, particularly in the early days of the settlement. They succumbed to diseases such as malaria and dysentery, to the poisoned spears of a particularly ferocious aboriginal tribe called the Jarawa or to the harsh working conditions. As a result, the penal settlement acquired the sinister soubriquet of "Kala pani" the literal translation of "black water" being interpreted freely in this context as "sea of death" and no doubt in earlier times the regime was as harsh as in any other prison of the period.

The prisoners appear to have fallen into two broad categories - common criminals who might have committed serious crimes such as murder (often unpremeditated, perhaps as crimes of passion and not habitual) or dacoity - or dangerous political prisoners who in the early days of a rising Indian nationalist movement often had committed serious crimes of violence or were dangerously



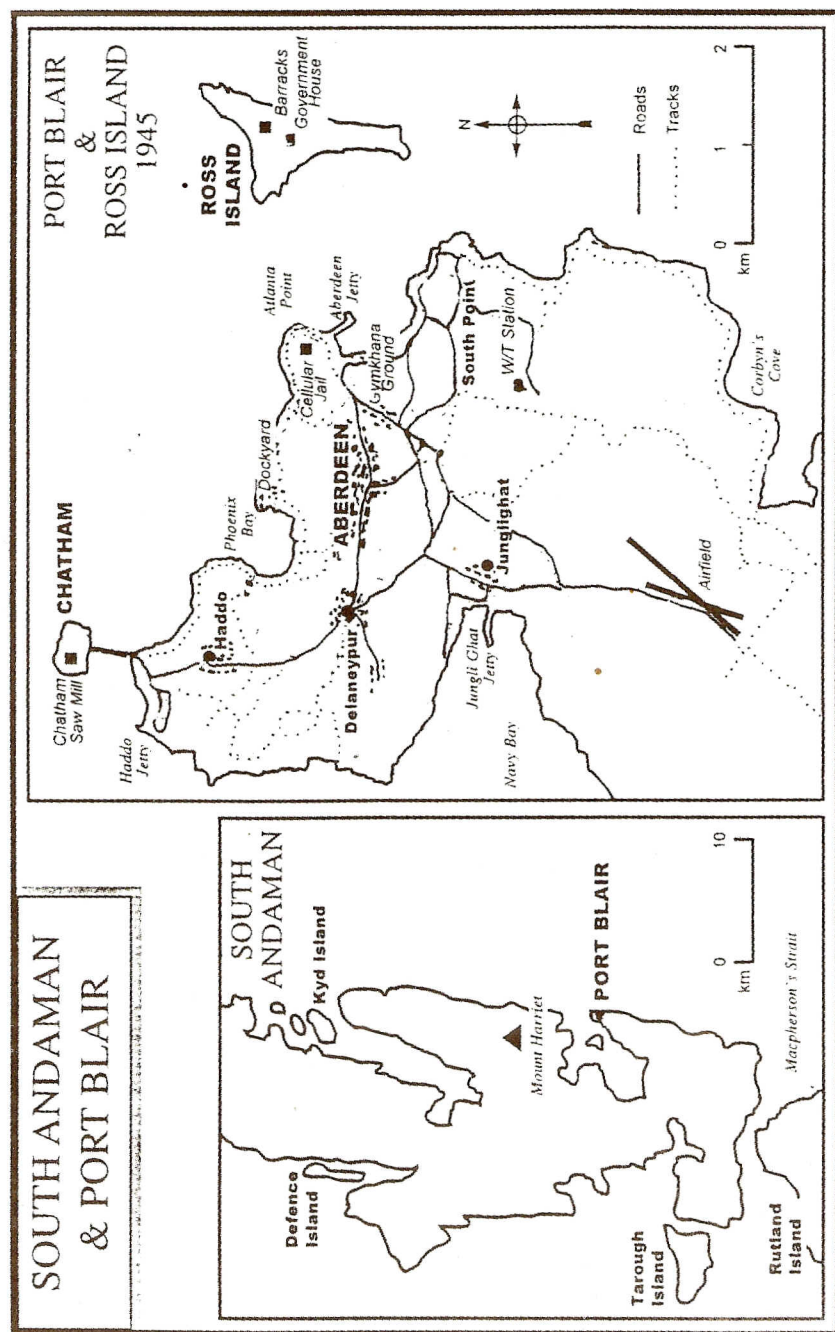
sedition. Such political convicts were moved to mainland jails in 1938 to the relief of the prison authorities in Port Blair who had found their presence unsettling to the other convicts.

Initially the convicts usually spent about six months in the cellular jail, allegedly in solitary confinement, but more probably in single cells. They would then be transferred to barracks for the next 9½ years, working as part of a labour corps in the Government sawmill or other sites concerned with the Government's forestry operations. Dependent on good behaviour, the convict would then be allowed to earn money, perhaps in service or given a small plot of land and the necessary tools, seeds etc to establish himself as a small-holder. His progress was monitored periodically by prison staff and once he was established, he might be offered the opportunity to be joined by his family or to take a wife locally. By 1942 many of the population of Port Blair were in this position or were the descendants of convicts. After bombing Port Blair from the air early in 1942, the Japanese invaded the Andamans and Nicobars in March of that year. Most of the European staff escaped just in time, but these did not include the Chief Commissioner Sir Francis Waterfall and four of his staff. One of these was later falsely accused of espionage by the Japanese and was beheaded. The Andamans, being the islands closest to the eastern seaboard of India, provided the Japanese potentially with an advanced base for supporting any seaborne invasion of India in the Madras area. Accordingly they started building up dumps of ammunition of all natures, supplies and POL, and built a concrete airstrip on South Andaman. The build-up continued until British submarines operating in the Andaman Sea and carrier-borne aircraft from the Bay of Bengal effectively blockaded the islands.

During the period of their occupation the Japanese massacred several of the inhabitants, the Nicobarese suffering particularly badly because the Japanese accused them of spying for the British. Some of these atrocities are graphically described by Trevelyan in his book *The Golden Oriole*. The Japanese also attempted to recruit for the Indian National Army from the convicts, with such remarkably little success that the Government of India rewarded the convicts' loyalty by a general amnesty when the islands were recovered from the Japanese in October 1945.

The task of recovering the Andamans and Nicobars was given to 116 Independent Indian Infantry Brigade. Included in 116 Brigade's order of battle was 99 Company under the command of Maj JK Dhondy IE. They had joined the Brigade in the Ranchi area in November 1944, after spending about six months in Bombay helping to clear up and rebuild the area of the docks damaged extensively in April 1944 when an ammunition ship caught fire (See Chapter One). At Ranchi they spent most of their time assisting in the training of infantry by battlefield simulation, until the order came to move with the Brigade to Port Blair.

The operation of landing at Port Blair was codenamed POPCORN. The force which sailed from Calcutta early in October 1945 included the RIN frigate



HMS *Narbada*, the Landing Ships (Infantry) HMS *Sansovino* and *Rocksand*, the troopship HMT *Dilwara*, and an LCT and an LST carrying the MT of the Brigade. HMS *Sansovino* and HMS *Rocksand* carried respectively 525 and 548 Landing Craft (Assault) Flotillas RM. Each flotilla consisted of 60 marines and 12 LCAs each taking 35 fully armed troops. Additionally, each LSI carried two Landing Craft Support (Medium) detached from 905 LCS(M) Flotilla RM; these were armed with .5 calibre machine guns. All these RM units had taken part in the Operation ZIPPER landings at Morib and Port Dickson in September (Chapter 21). HMS *Sansovino* carried 8/6 Rajputana Rifles (8 RajRif) and 99 Company. Among the RM officers in HMS *Sansovino* were Lt AJ Donald RM, and Lt K Roebuck RM, commanding the two LCS(M)s, and Lt AJ Lawrie RM of 525 LCA Flotilla. In a letter to his parents, written soon after the landings, Lt Donald described what happened when the force reached South Andaman. "We arrived off Port Blair during the dawn hours of 7th October (1945). At 7 o'clock in the morning the Japanese Vice Admiral came out to HMT *Dilwara* to confer with the Brigadier and the Naval Force Commander, giving them all the information about the minefields etc. At about 10 o'clock the troops landed - we took about 15 in each of our craft and landed them at Aberdeen jetty." Lt Donald's personal diary has an entry: "11.45 Landed 99 Ind Fd Coy (sic) at Aberdeen jetty." In fact this was the third element of the company landed.

The first troops ashore were from 8 RajRif and elements of 99 Company. 8 RajRif Operation Order No 5 for Operation "POPCORN" clearly indicated that some Japanese booby trapping was expected. Each of the leading companies landing was accompanied by a Sapper reconnaissance party from 99 Company, equipped with a mine-detector. In the event, the landings were unopposed and free from incident. Lt Lawrie recalled that as he took his first LCA alongside Aberdeen jetty, he saw a large body of Japanese troops drawn up on parade to meet our troops. They were watched by a crowd of curious onlookers who turned out to be convicts from the penal settlement.

Once the Brigade landings had been completed a formal ceremony was held on the Gymkhana Ground at Aberdeen, at which the Japanese Vice Admiral and Major General surrendered their swords to the Commander 116 Brigade (Brig Salomons) and the Naval Officer in Command (NOIC) (Capt Blair RNR, a descendant of Lt Archibald Blair RN, who founded the settlement at Port Blair). The latter were accompanied by a senior British civilian official, the new Chief Commissioner, Andamans and Nicobars.

Shortly afterwards, the main naval force withdrew, leaving behind the LCT and LST, and Lt Donald's and Lt Roebuck's two LCS(M)s, the latter to act as despatch boats for the NOIC's staff. They stayed in Port Blair until HMS *Sansovino* returned on 19th October with 525 LCA Flotilla RM and the balance of 116 Brigade's units. She left again on 20th October, taking Lt Donald and Lt Roebuck with their detachment and their craft with her, as well as the craft and crews of 525 LCA Flotilla.

The order of battle of 116 Brigade was unusual in some ways but well-suited to a formation tasked as it was to garrison a remote island, some distance from the mainland and visited by one Dakota aircraft weekly and a ship once every three or four weeks. For this operation there were three infantry battalions but no artillery element. The detailed order of battle is given at the end of the Chapter and shows the extensive administrative services considered necessary. The medical cover in particular was comprehensive. This may have been to some extent because of the high malaria risk in the Andamans; the normal daily dosage of one mepacrine tablet was doubled. The only malaria casualty in 99 Company was the officers' mess cook - the only IOR who did not attend the evening Company Parade when each man took his mepacrine in front of his NCOs.

The Brigade units took only a skeleton scale of transport with them; in the case of 99 Company this consisted of the OC's jeep, two Chevrolet 15-cwt trucks and two Dodge 3-tonners. On arrival in Port Blair the company found three Japanese Army horses in the area allotted to them. One of these horses was used by 3 Platoon commander to visit his outlying work-sites. When necessary, Japanese trucks and drivers were used to move materials, etc. A company of 1/7 Rajput Regt. was detached to Car Nicobar, accompanied by Lt Francis and No 1 (PM) Platoon to give Sapper assistance. The Indian major commanding the Rajput company liked to designate himself "Supreme Allied Commander, Nicobar Islands" for some reason. He returned with Lt Francis and his platoon in December, bringing with him several items of British war material evidently captured in Singapore or Malaya but now obsolete, eg 18pdr field guns.

Lt Francis and 2IC Capt Brock left the Company in December, returning to Kirkee on the first stage of their release (to New Zealand in the case of Capt Brock) or repatriation (to UK for Lt Francis, who later became a Regular officer). These two and Lt Hardie, who was on leave when the company sailed for Port Blair, were replaced by Capt EC Newlyn RE, Lt OE Naddermier RE and Lt DL Jones RE. The latter three officers had reached Calcutta from Kirkee just after the company had sailed. With a party of jawans returning from leave who had similarly arrived too late to rejoin the company, they were attached to 329 (RB) Indian Field Park Company IE (commanded by Maj GF Page), on Barrackpore Airfield whilst awaiting passage to Port Blair. Eventually, in December 1945, the party reached Port Blair in SS *Maharajah*, the ship used before the war to transport the convicts. With the arrival of these officers, the officer establishment of 99 Company became as shown at the end of the chapter.

The Brigade's tasks in the Andamans were essentially directed towards securing the islands, restoring or improving facilities in preparation for handing them back to the civil administration and improving their own amenities. 99 Company's tasks included road repair, construction of a dam to secure a water supply for one of the battalions, constructing garages and improving accommodation for Brigade HQ, erecting a large Lahore shed on the quayside

at Port Blair and demolishing a Japanese timber-framed radio tower. The latter task, out in the jungle, gave a rare opportunity to see the conditions under which the Japanese former naval and military garrison were living once 116 Brigade had taken over. There were about 15,000 of them all told and they were concentrated into two large camps under the control of their own officers and responsible for their own administration, being self-sufficient for supplies, vehicles, POL etc. They were not guarded by Brigade troops at all; in fact their camps were out of bounds to the Brigade normally and were too far from the Brigade area to permit easy access. Nevertheless most jawans seemed to have acquired small souvenirs such as Japanese badges of rank or similar items.

One amenity removed from the Japanese was the party of twenty or so "comfort girls", of various Asian nationalities who had been procured for them by a particularly unpleasant former convict. Until they could be assessed and repatriated, these girls were guarded by a company of 1/7 Rajput. The eyes of the Rajput jawans no doubt lit up when they were told of this duty, until their company commander paraded these unfortunate girls in front of the company and read out the Medical Officer's report on each girl in turn.

Whilst awaiting repatriation to Japan, the Japanese provided working parties under their own officers for tasks required by the Brigade. Lt Donald commented "they were just as I had expected - small and ugly, their uniforms were filthy and torn - but they could work. I have never seen men work as hard as those Japs did - unloading ships and mending roads." The Japanese evidently had also been subjected to some propaganda or perhaps knew little about the Indian Army and how it worked. The major who reported each evening to the OC 99 Company for details of the following day's work, told Capt Newlyn that he could not believe that British officers would happily take orders from an Indian officer (Maj Dhondy was a Parsee) and asked Capt Newlyn to confirm that in reality it was he who commanded the company. He received a very forthright answer and was left in no doubt as to the actual situation!

One of the main tasks of the Brigade battalions was the dumping of the extensive stockpile of SAA, artillery and mortar ammunition and aircraft bombs, which the Japanese had dispersed round South Andaman, often in an apparently haphazard fashion. The ammunition was loaded into the LST and LCT which formed the naval support to the Brigade, and dumped into the deep water surrounding the Andamans. The officers of 99 Company also dumped boxes of Japanese plastic explosive into the deep waters of Port Blair harbour but with the object of augmenting the rations with fresh fish. The general impression gained was that Japanese PE was not as effective as the British product. This was only one of the recreational pastimes available. The company took full advantage of the sandy beach at Corbyn's Cove to swim, play volleyball and kabbadi. The company held a cross-country run, won by Nk Bhau Bhosle with the company mascot coming in 23rd. This mascot was a Deccan ram, originally issued to the Sikh platoon in Dighi as "meat on the hoof" but imaginatively conserved. Despite a somewhat lugubrious expression this animal was quite a

personality, having an inquisitive nature. He had a fondness for cigarettes (which had to be unsmoked - fag ends were not acceptable) and paper generally. He was distinctly unpopular with a unit he was visiting with his platoon commander, when he seized and devoured a closely-typed nominal roll just produced by the Chief Clerk.

By the time the Japanese were given passage to Rampang, their uniforms appeared to be in a sorry state. However, as each party embarked, it was evident that every man wore a brand-new uniform - complete with rank badges.

Lt Donald recalled that "the only allied PoWs in the Andamans were the crew (about five) of an aircraft that had been shot down. Evidently they had been quite well treated by the Japanese, although there were a good many atrocities among the civil population". As a result of these atrocities, some half dozen senior Japanese officers were taken to Singapore and stood trial as war criminals. The Vice Admiral commanding the whole Japanese garrison was among those hanged in Changi Jail early in 1946.

Distinguished visitors made brief inspections of the Brigade during New Year tours, namely Field Marshal Sir Archibald and Lady Wavell, Viceroy and Vicereine, and Admiral Lord Louis Mountbatten CinC SEAC.

Late in February 1946 the Brigade was warned for return to India. On instructions from Brigade HQ, all Japanese horses held by units had to be shot and subsequently burnt. In 99 Company this sad duty was given to No 3 (Sikh) platoon commander who took some care to shoot each horse out of sight of the others. Subsequently, as each funeral pyre was being prepared, he found a stack of aircraft bombs under bushes not thirty yards away from the first. Perhaps this was a classic example of "time spent on reconnaissance is seldom wasted". However, no explosions resulted despite the fires' burning all day.

99 Company disembarked at Vizagapatam to find no troop train available for the company as a whole. It was dispatched by platoons on successive days via Calcutta to Clement Town, Dehra Dun. 116 Brigade disbanded on its return to India and 99 Field Company heard it was likely to suffer a similar fate in due course (in the event, this did not happen). Meanwhile the company caught up on leave and concentrated on individual training, education, cadre classes and so on. Those in the Mahratta and Sikh platoons who were not on leave took advantage of the hot-weather closure of the SME Bridging Camp at Dhanauri, near Roorkee, to carry out some bridging and rafting training which proved very useful later that year when the company found itself in Iraq as part of Force 401.

OFFICERS WHO SERVED WITH THE COMPANY IN THE ANDAMANS

OC	Maj JK Dhondy IE
2IC	Capt T Brock (until December 1945)
	Capt EC Newlyn (from Dec 1945)
1 (PM) Platoon	Lt KB Francis (until December 1945)
	2Lt Ajit Singh Mangat IE (from Dec 1945)
2(Mah) Platoon	Lt OE Naddermier
3 (Sikh) Platoon	Lt DL Jones
MO	Lt VS Banaji IAMC
Sub	Nawab Khan
MT Sergeant	Sgt Morris

Note: Lt Hardie who was on leave when the Company left for Port Blair did not rejoin the Company subsequently.

116 INDEPENDENT INDIAN INFANTRY BRIGADE ORDER OF BATTLE

HQ	116 Independent Indian Infantry Brigade
Engineers	99 (RB) Indian Field Company IE
	Port Detachment
	286 Indian Docks Operating Company IE
	293 Indian IWT Operating Company IE
Signals	116 Brigade Signals Section, Indian Signals
Infantry	7/1 Punjab Regiment
	8/6 Rajputana Rifles
	1/7 Rajput Regiment
RIASC	116 Brigade Defence Platoon
	2 Indian Composite Platoon
	727 Indian Supply Platoon
	300 Indian Field Bakery Sub-Section
Medical	68 Indian Field Ambulance IAMC
	113 Indian Anti Malaria Unit
	33 Indian General Hospital (1/3)
	58 Indian Field Laboratory
	54 Indian Medical Stores Sub-Depot
	74 Indian Field Hygiene Section
	1 Indian Field Ophthalmic Unit
Dental	BT Dental Unit
	IT Dental Unit
	Indian Dental Mechanic Section
Ordnance	116 Brigade Forward Maintenance Section IAOC
IEME	116 Brigade LAD IEME
Veterinary	Indian Veterinary Section IAVC
Provost	116 Brigade Provost Section CIMP
	Field Security Section CIMP
Intelligence	Detachment SEATIC
Pioneers	Company Indian Pioneer Corps
Postal	Indian Postal Unit
Pay	Indian Field Cash Office
Canteens	Canteen Stores Unit (BT)
	Canteen Stores Unit (IT)

COMPILER'S NOTES ON SOURCES

The description of the activities of 99 Company is drawn from the recollections of Maj KB Francis, Lt Col DL Jones and Prof OE Naddermier who all served as junior officers in the Company during this period. No war diaries were kept by the Company whilst in the Andamans.

The details of the composition of 116 Independent Indian Infantry Brigade were taken from Indian Army Orders of Battle in the India Office Collections of the British Library; the help and friendly co-operation of the Deputy Director, Mr AJ Farrington, is gratefully acknowledged.

Information on the landing at Port Blair and some of the subsequent events was provided by Maj AJ Donald RM and Hon Col AJ Lawrie RMR who as lieutenants RM, both took part in the landings. Contact with these two officers, Sgt Cross RM and Marines Bentley and Chandler was established as a result of a notice published in the Royal Marines' Corps magazine *The Globe and Laurel* by courtesy of the Editor. Maj Donald also kindly provided copies of 8/6 Rajputana Rifles Operation Order No 5 for Operation "Popcorn" and a town-plan of Port Blair supplied to him for the landings.

Background information on the Andaman and Nicobar Islands was gleaned from various gazetteers and guidebooks on India, and from *The Golden Oriole* by Raleigh Trevelyan who was born in Port Blair in 1923, when his father was commanding the company of 5/8 Punjab Regiment, who formed the garrison at that time. Prior to visiting Port Blair in 1986 Mr Trevelyan researched the history of the penal settlement up to the arrival of 116 Brigade in 1945.



Class 12 Batwing Raft

CHAPTER TWENTY-FOUR THE NETHERLANDS EAST INDIES 1945-46

Compiled by Lieutenant Colonel WL Sheldon

Background

Those who did not serve in South East Asia or are of a more recent vintage who do not know, or understand little, of the fracas in the Netherlands East Indies (NEI) after the war and why British forces were involved, may find a brief description of the background helpful.

During the early part of August 1945 the units of 15th Indian Corps earmarked for Operation 'ZIPPER', the invasion of Malaya, were in their respective concentration areas ready to go. Then the 'A' bombs were dropped on Japan and suddenly the war seemed over - but was it?

The abrupt capitulation of Japan in August 1945 left much of South East Asia in a turmoil requiring rapid redeployment of Allied forces. To meet the wishes of the Americans the boundaries of South East Asia Command (SEAC) were extended to include the NEI (now Indonesia). The 15th Indian Corps was redesignated Allied Forces Netherlands East Indies or AFNEI. AFNEI comprised the 5th, 23rd and 26th Ind Divs and was given responsibility for Sumatra and Java. The task was to take the surrender of the Japanese forces, concentrate and succour the Released Allied Prisoners of War and Internees (RAPWI), maintain the infrastructure where possible and establish stability until the Dutch, still reeling from the German occupation of The Netherlands, could resume control. The NEI covered a huge area about 3500 miles long from the northernmost tip of Sumatra to Dutch New Guinea in the east, and contained within it some 16,000 islands, mostly small, but including Sumatra, Java, Celebes and most of Borneo. Of this area only Sumatra and Java were occupied by AFNEI. In some cases place names have changed since independence.

Sumatra is by far the largest island being some 1,000 miles long from north to south and 300 miles at its widest in the southern half. Bisected by the Equator, mountainous in the north and west, swampy in the south and east, it was mainly covered by dense tropical jungle. The population of about 8 million was mostly scattered in villages (kampongs) throughout the island with sizeable

concentrations in four main towns, Medan the capital in the north-east, Padang on the west coast with Fort de Kock (Bukittinggi) 90 miles to the north and inland, and Palembang with its oil fields in the south-east. Railways were few and roads few and poor. Religion was mainly Muslim but with a significant number of Christians in the area round Lake Toba 100 miles west of Medan and a sizeable Chinese population of various religions in the towns. The economy was based on rubber, tea, tobacco, timber, tin, coal and oil. This was controlled pre-war by the Dutch but with significant British and American interests. War time trade restrictions during the Japanese occupation and before had resulted in neglect and reduced much of this economy to a shambles.

Java was geographically quite different. Less than a third the size of Sumatra, mountainous and intensely cultivated throughout, it had a population of about 40 million. This was mostly Indonesian and Muslim but with considerable numbers of Chinese. Also because inter-marriage between Europeans and Asians carried no stigma in the NEI as it did in India, there were large numbers of Eurasians particularly in the towns. Communications by road and rail were extensive but in need of maintenance. The economy was similar to that of Sumatra less coal and oil, but interestingly Java pre-war produced most of the world's supply of quinine, which before the advent of modern anti-malarial drugs was a significant asset.

Initially the tasks given to AFNEI appeared not unduly onerous. The Japanese forces were not overtly hostile, to succour the RAPWI seemed mainly a matter of nourishment, clothing, transport and accommodation and, although much maintenance would obviously be required, the country was still largely up and running. On this basis it was at first thought that the 23 Div on its own would be sufficient to handle both Sumatra and Java. Further consideration increased this to two divisions, 26 Div less a brigade in Sumatra and 23 Div plus a brigade in Java. But still the political factor had been underestimated in the appreciation and eventually the whole of AFNEI became involved.

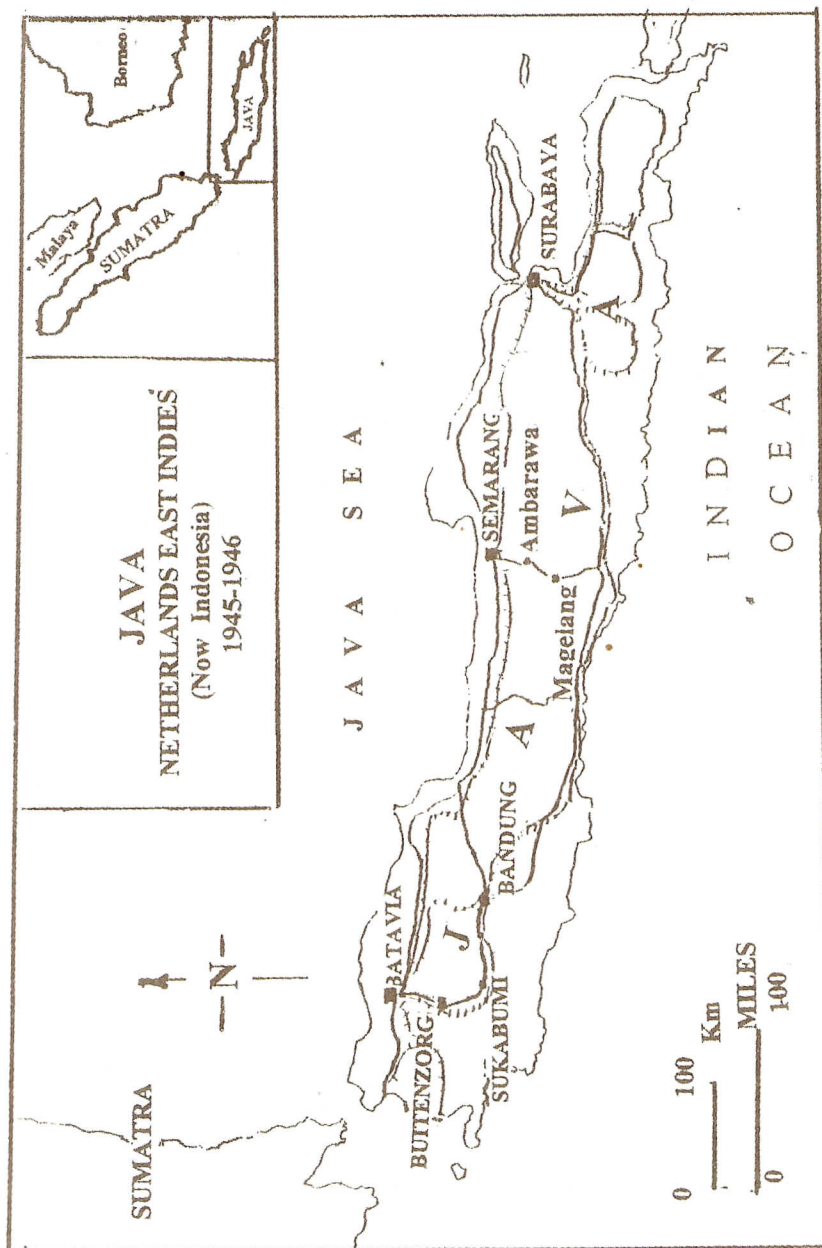
To appreciate the political situation it is necessary to understand what the NEI meant to The Netherlands and what had happened to the Indonesians during the war. The NEI was almost the whole of the Dutch empire and was even more the jewel in the Dutch crown than was India that in the British. They had nurtured their beloved Indies for centuries and it had brought them much wealth. In return the Dutch brought great benefits to the Indonesians. Shortly after the Dutch queen fled to England in 1940 she made a speech in which she indicated that after the war (which had not yet begun in the East) the NEI would be given Dominion status. No time frame was given but the Indonesians interpreted this to mean immediately the war ended. Following the war-time ravishment of The Netherlands however, the Dutch were naturally anxious to rebuild their country without delay. To do this, income from their empire was vital and

Dominion status could wait - a decision not at all in line with Indonesian aspirations.

After the Japanese conquest of the NEI early in 1942 all the Dutch and many of the Eurasians were interned, starved, ill treated and humiliated in every way in order to demonstrate their weakness in the eyes of the Indonesians. The Indonesians themselves, although now part of the so called "Asian Co-prosperity Sphere", were themselves also harshly treated. However certain Indonesian elements, who had opposed the Dutch pre-war, were encouraged in their opposition by the Japanese and selected members were given military training to form the nucleus of a future Indonesian Republican Army. At the war's end much Japanese weaponry fell into their hands and, in Java particularly, the formation of the Republican Army began immediately.

Whilst the respective aims of the Dutch and Indonesians could readily be understood, without trust and massive compromise on both sides they were incompatible. Compromise on this scale was on no one's agenda. Despite urgings on the part of some moderates in the emerging Indonesian hierarchy towards caution in achieving their aim the hawks demanded freedom (Merdeka) immediately and, for the sake of honour, preferably by force. Into this bubbling cauldron in late September and early October 1945 the British forces were injected knowing that in British India plans concerning the hand-over of power were already emerging. Although the British were permitted to land unopposed, the Indonesians quickly saw them as the vanguard for a Dutch return. At the same time some Dutch saw the British as unduly sympathetic towards the Indonesians. In such an atmosphere strict neutrality was an uneasy stance. When in Java and later in Sumatra armed aggression by the Indonesians against the British began, coupled with brutal acts towards the RAPWI (many of whom were killed and others held hostage as a bargaining counter), fighting began in earnest.

When the British arrived, many tens of thousands of RAPWI were still in remote concentration camps where conditions throughout the war had been appalling and where many had died of disease and starvation. Immediately after the surrender the Japanese produced food and so the starvation situation no longer existed. However most camps were still drastically short of water and medicines, hygiene was bad and large numbers of survivors were chronically ill. It was necessary to guard these camps, improve the conditions, organise their evacuation and maintain roads and bridges on the evacuation routes often in the face of Indonesian aggression particularly in middle Java. Because of the huge numbers of RAPWI, especially in Java, and the need to accommodate them in safe areas, their evacuation was in some cases necessarily slow. In those cases where the Indonesians had already taken over remote camps in middle Java, evacuation without massive bloodshed proved impossible for many months.



In all of this there was Sapper work aplenty in which all units were to a greater or lesser extent involved. It is against this background that the "story" of each unit is written, minimising the humdrum and concentrating on the more unusual or amusing incidents which took place.

Java - 5th and 23rd Indian Divisions

The RB units involved in the activities in Java were 20 Field Company under command of 9 Brigade of 5 Ind Div, 91 Field Company under command of 37 Brigade of 23 Ind Div and 24 Field Company under command of 458 Forward Airfield Engineers (FAE) itself a Royal Bombay headquarters. In accordance with the overall plan 1 Brigade of 23 Div began disembarking in Batavia (Jakarta) on 25 September. 37 Brigade with 91 Company followed by mid-October and moved almost immediately to Bandung some 90 miles south east of Batavia. 49 Brigade voyaged further east to the Dutch Naval Base at Surabaya arriving on 25 October where it was reinforced by 9 Brigade of 5 Ind Div with 20 Company early in November. 24 Company arrived in Batavia on 30 December.

20 (RB) Field Company

To understand the situation which existed in Surabaya by the time of the arrival of 20 Company further background information may be useful. Before 49 Brigade of 23 Div landed in Surabaya on 25 October the Indonesians had already received large stocks of arms from the Japanese who had themselves withdrawn inland into concentration areas. The Indonesians promptly turned upon the Dutch RAPWI in their midst and murdered or imprisoned several hundred, mostly women and children. Dr Soekarno, the overall nominal leader of the Indonesian Republican Movement, had instructed Dr Moestopo, the local Indonesian leader not to oppose the British landing and accordingly 49 Brigade under Brig Mallaby was able to secure all key points including the RAPWI camp in the south of the town without bloodshed. The Indonesians, suspecting that Mallaby intended holding them down by force pending the return of the Dutch, attacked the town on 28 October. They had available some 12,000 soldiers trained and armed by the Japanese supported by an armed mob of some 75,000. This mob poured through the town murdering isolated parties of British and Indian soldiers and many Dutch women and children. Whilst negotiating with the Indonesians Brig Mallaby was himself murdered. Following this the brigade was withdrawn to the dock area having suffered some 400 casualties during the fighting. It was then decided that the greater part of 5 Ind Div should be sent from Malaya to reinforce 49 Brigade. It was as part of this force under command of 9 Brigade that 20 Company under Maj EC Fisher arrived in Surabaya on 1 November 1945.

Surabaya was by pre-war standards a modern city of some 300,000 inhabitants, mostly Indonesian but including about 38,000 Chinese and many thousands of Europeans and Eurasians. It was well laid out with good roads, water and electricity supply and sewerage. The town was about 6 miles long north to south and 2 miles wide with a canalised river called the Kali Mas running through it. The docks and airfield were at the north of the town and in the south was Darma, a residential area where there was a large RAPWI internment camp containing over 6,000 mostly women and children. Inland the country was mainly rich, green, flat rice fields dotted with kampongs and with mountains in the distance.

Almost immediately after the arrival of 5 Div its commander, Maj Gen EC Mansergh, issued an ultimatum to the Indonesians demanding the immediate hand over of their weapons failing which his forces would come and take them. This demand was, not unnaturally, ignored and on 10 November a full scale attack was launched with naval guns, aircraft and the divisional artillery all taking part. Even so the town was not cleared completely until 28 November and thereafter in the surrounding countryside infantry/armoured columns with Sapper support continued the action against isolated bands until mid-January. This then was the scene against which 20 Company operated throughout the five months it remained in Surabaya. The company was quickly into the thick of Sapper work particularly water supply which in a tropical country was an ever present requirement. Capt J Osborne has described in his memoirs the provision of water to one of the RAPWI camps. "I arrived with a few sappers and a stand pipe to connect into a water main which had been closed off by the Japanese. I was quickly surrounded by a silent crowd of women and children who watched intently. When I turned on the water they all rushed forward tearing off their clothes intent on standing under the water as long as it lasted. Having been deprived of water for over three years, they assumed it would soon be turned off. Much was their delight when I assured them that they could henceforth control it themselves".

The company undertook many works of a general Sapper nature within Surabaya including electricity supply and, as an illustration of the ubiquitous nature of such tasks, they requisitioned a fire engine and thereafter dealt with any outbreaks in the 9 Brigade area. Operating in a more military role, a platoon took part in an assault river crossing during the clearing of Surabaya and detachments up to platoon strength regularly accompanied fighting columns in their forays into the countryside. On those occasions, in addition to dealing with mines and booby traps, minor bridging requirements, such as crossing blown culverts, were dealt with by taking along 30ft of Bailey equipment which was then recovered after the obstacle had been crossed. That these tasks were much more hazardous than this bland description suggests, is borne out that in

spite of its relatively short stay in Java before it returned to India in April 1946, 20 Company sustained more casualties than any other RB unit in the NEI - 8 killed and 10 wounded (See Roll of Honour).

24 (RB) Field Company

Little information can be gleaned from the War Diary of this unit other than that the OC was Maj JH Preston and the 2IC Capt I Feather. 24 Company had been the Field Company of 46 Indian Beach Group on "Zipper" landings. Once the troops were established ashore, the need for the Beach Group's Beach Maintenance Area and the Group itself disappeared. An advance party of 24 Company, under Capt Feather, left Singapore for Batavia (now Jakarta) on 22 December and the whole company was concentrated there by 30 December. On arrival the company was placed under command of 458 FAE and engaged on works in and around Batavia. Capt Feather fills in some of the gaps in an interesting and amusing recall.

"In December the Company was ordered to Java and I went with our small amount of transport and advance party down to Singapore. We duly embarked on a LST and set sail on a three day voyage to Batavia. The voyage was quite interesting, the skipper only seemed to appear for a short time on the bridge around midday, briefly attired with a towel around his middle. The First Mate was like a golden Errol Flynn, naked to the waist, with a bandanna around his head and a huge gold ring in one ear. The crew and officers seemed strangely remote from one another and it transpired that the officers feared a mutiny from a rebellious crew, all long overdue for Python. However everything remained calm and there seemed to be a truce when we all attended midnight Mass on Christmas Eve, administered by a Roman Catholic padre also in transit. Navigation proved to be excellent and we passed close to Krakatoa, the volcanic island which had a side blown out in 1883 and sent a tidal wave around the world. It was rumoured that the Skipper had made an over-enthusiastic landing at Cape Rachado (just south of Port Dickson on the west coast of Malaya presumably as part of Zipper) with the LST ending up well into the jungle. I believed it when on arrival at Tanjungpriok (Batavia Docks), the LST proceeded without delay to dock and with considerable impact struck the enclosed end of the dock, knocking several tons of masonry into the water. The story of the errant LST is referred to in John Winston's book *The Forgotten Fleet*. We arrived in Batavia on Boxing Day. A pleasant place with a network of canals and a splendidly placed racecourse in the centre of the town surrounded by the Government Buildings - some occupied by 15 Corps HQ and 554 Sub Area HQ. Accommodation for the company was part of a Chinese-run hospital whilst the officers were housed in a very pleasant bungalow with the CSM and MT Sgt nearby all in what appeared to be a fairly affluent Chinese community area.

"We were soon to find that Batavia was interspersed with kampongs suspected as pockets of Free Indonesia and there were occasional clashes between Indonesians and Dutch or Dutch Indonesians which proved unpleasant for the British umpires in between. Indeed on arrival in our allotted area it was suggested that we continued to post a man with a long bamboo pole on the canal bridge, his task being to push any floating bodies in the quite fast running water under a barrier slung under the bridge and ensure rapid transit down to the sea. Fortunately there were few whilst we were there. The rest of the Company having arrived safe and sound, we settled down to fairly normal routine. In the middle of January Maj Preston departed on Python and I was left in charge with Capt Henwood as 2IC. We took over an emergency water-bowser supply point set up outside the swimming baths, where the water came from an artesian well. The normal town supply came from the mountain area of Bandoeng some thirty miles away and was obviously liable to interference. The Mahratta platoon went off on detachment to run a small sawmill on the outskirts of the town. It was there that a small brewery was discovered across the canal in Free Indonesia. It had all the beer making ingredients except water. The Brig agreed a bowsered supply should be organised and in due course a modest amount of beer was produced.

"Advice and supervision was provided to sort out the sewerage system at the main prison which housed a number of rather dangerous Jap PoWs. Several Kempf Tai officers were in individual cages. They were all six footers and of fine physique and most unlike any of the Japs I had seen hitherto; it was said they came from Northern Japan. The Japs provided labour for the airfield maintenance and continued to run the various well stocked stores. I remember one stationery store which also carried a large stock of whisky in half bottles. When decanted into labelled Canadian whisky bottles, it was quite acceptable and one VIP visitor commented that the Canadian whisky was 'really good stuff'. In April we were ordered back to Kirkee, Capt Henwood, who had been selected for a Regular commission, being left behind. The company embarked on the *Reine Del Pacifico* and sailed away on a pleasant cruise to Calcutta. I was quaintly made OC Troops with a medical colonel professing to be my adjutant. From Calcutta we entrained for Dighi where 24 Company was disbanded on 24 May"

91 (RB) Field Company

91 Company under Maj J Beddows arrived in Batavia (Jakarta) from Malaya in mid-October 1945. Leaving 3 Platoon (Sikhs) under Lt JR Hudson in Batavia, the remainder of the company moved by road and rail with 37 Indian Infantry Brigade to the area of Bandung arriving there on 21 October. Reception from the locals along the railway line appeared deceptively friendly. The reason for

this strong force in Bandung was the existence in Tjimahi (Chimahi) on its western outskirts of three concentration camps and a RAPWI hospital containing some 8,700 internees mostly women and children.

Initially one platoon was on permanent guard duties whilst the remainder of the company endeavoured to ease the appalling situation in the camps. Water was the main requirement and good use was made of equipment located in local Japanese stores dumps to provide this. In spite of heightening tension in the area, the heads of departments in the local PWD remained friendly and co-operative.

On 24 November the situation deteriorated badly and it became necessary to start withdrawing the RAPWI into military areas. This was completed by 28 November when some 8,700 RAPWI plus military were confined within a two mile perimeter defended area. At this time the company was employed almost entirely on guard duties and the construction of defence works. This continued until mid-December with small detachments accompanying columns of 3/5 Royal Gurkha Rifles (RGR) in Sukabumi and Buitenzorg (now Bogor) 100 miles to the west.

On 16 December the company moved into Bandung. On the same day a detachment accompanying an infantry party clearing a local kampong, discovered a number of Caterpillar tractor stores which enabled a 'liberated' D2 tractor to be repaired. During the remainder of the month, in addition to supporting infantry forays and starting repair work on the airfield, an interesting bridge repair was undertaken. Due to flooding an abutment of a reinforced concrete bridge on the airfield road had collapsed. Whilst undertaking the repair it was found that there were no foundations under the abutment which instead was built directly on to soft mud. Sheet piling and concrete enabled completion of the task by 24 December.

Meanwhile 3 Platoon under Lt Hudson lived a life of its own between the end of October when the company left it in Batavia and 1 February when it rejoined the company in Bandung. During this time it was under command of the CRA's Brigade in Semarang on the northern coast of Java some 280 miles east of Batavia. On 27 October the platoon embarked on a LCT for the voyage from Batavia to Semarang. Immediately there was an incident when the craft ran straight into a marker buoy and sprang a leak in the bows. Apart from that and heavy rain which made life on the open deck uncomfortable, the trip was uneventful and the platoon arrived in Semarang two days later.

A recce of RAPWI camps in the Semarang area revealed 6,400 Dutch women and children living in very poor conditions and particularly short of water. The

platoon immediately commenced work to provide an emergency supply. A further recce of camps in Ambarawa and Banjoebiroe some miles to the south revealed a similar state of affairs. By this time fighting was in progress in Magelang in the centre of Java and tension was high in Semarang itself. As a result the platoon found itself heavily engaged in guard duties, leaving only twelve men to deal with the provision of water to the RAPWI camps. The tense situation continued and the platoon was totally occupied with guard duties and water supply tasks, the latter in Semarang and also the Ambarawa and Banjoebiroe camps.

On 18 November fighting in Semarang broke out in earnest and the platoon captured two Indonesians who were found to be in possession of dum dum bullets. They were handed over to the Japanese for necessary action! On 23 November LHav Dalip Singh MM, whilst with a column clearing the road to Ambarawa, was wounded in the stomach by an Indonesian LMG bullet. Despite this he continued mine clearing ahead of the column until it reached Ambarawa. For this act of bravery he was awarded a bar to his MM.

On 27 November sabotage to the main electric power supply outside the brigade area caused failure in the town. The platoon managed to restore power using an emergency generator by restricting the supply to the British forces and RAPWI areas only. Petty sabotage of the electricity and water companies by Indonesian ex-employees continued but was drastically dealt with by arresting ex-foremen of those companies and shooting Indonesians with tools found lurking near sub-stations and stop-cocks.

On 1 December the platoon blew open six safes and collected (Jap) f64,000. The following day HMS *Caprice* and the cruiser HMS *Sussex* offered engineer assistance which was accepted. It would be quite unjust to suggest that this offer might have been influenced by the previous day's activities! During the remainder of its detachment in Semarang, in addition to maintaining the electricity and water supply, the latter in spite of a home goal when a shell from the cruiser burst a 6 inch main, the platoon had a variety of tasks. Two Japanese bunkers and a stock of aerial bombs on the airfield were destroyed, and mine lifting in the Ambarawa area resulted in three sappers being wounded; assistance in controlling a large fire in Semarang was given using water pumps and explosives and a large bank safe was blown with what result the War Diary does not reveal. On the 5 January the platoon was shelled from an Indonesian-manned Japanese 75mm gun, fortunately without casualties.

In mid-January the platoon handed over its tasks to 3 Airborne Squadron RE under Maj PNM Moore and left Semarang to rejoin 91 Company in Bandung. It travelled via Batavia and whilst there gave assistance in the building of a

Bailey bridge. A further bridge near Bandung was repaired en route. The platoon rejoined its parent company on 1 February 1946. Meanwhile Lt Hudson, who whilst in Semarang had been promoted to captain, had flown direct to Bandung to take up duties as company 2IC.

January and February were largely taken up in reconnaissance, general repair work, supporting infantry operations, clearing road blocks, defusing booby traps and the destruction of captured Indonesian ammunition. In March a strong platoon under Lt Hammett constructed a Bailey ferry to enable Sherman tanks to cross a water obstacle avoiding a weak bridge. On 13 March a section came under machine gun fire from an Indonesian ambush and 4 men were slightly wounded. At the same time a platoon supporting 3/10 GR cleared 16 road blocks under enemy fire without casualties. An interesting find on 25 March was of two Japanese bodies near a road crater, obviously hoist on their own charge, which bore out the belief that not all Japanese had surrendered.

During April and May, hampered by heavy rain causing landslides, maintenance work continued on the airfield and the road to Batavia. In addition training was given to newly formed Dutch Pioneer Platoons. An unusual task was the start of rehabilitation of a local mosque - an attempt at "hearts and minds" perhaps.

June saw the arrival of 68 (Bengal) Field Company RIE and after handover 91 Company returned to Batavia on 5 June, travelling via Buitenzorg where a platoon under Lt Whitworth was left on detachment. On 10 June a 50ft Bailey bridge was built under continuous mortar fire but with no casualties. On 11 June however a detachment with infantry units on brigade operations sustained 4 killed and 2 wounded when a 15cwt truck was destroyed by a mine.

On 1 July No 3 Platoon, having handed over to 71 (Bengal) Field Company RIE in Buitenzorg, rejoined the company in Batavia. Work was started on clearing the site of a blown bridge ready for replacement by a 70ft DS Bailey and various other bridge works were also undertaken. The ever-present cries for water were answered when water points for 4/8 GR and 3/5 RGR were provided. Throughout the remainder of its stay in Java the company was kept busy on general maintenance work, together with mine clearance, repair to roads and culverts and destruction of Indonesian ammunition. The company returned to India in November 1946.

Sumatra - 26 Indian Division

The task of occupying Sumatra fell to 26 Ind Div less a brigade. The surrender of the Japanese having been taken at sea off Padang on the west coast, Divisional



HQ and 71 Brigade including 28 (RB) Field Company RIE under Maj W L Sheldon RE and 328 (RB) Field Park Company under Maj G W Launder (less a detachment) disembarked at Emmahaven (Telukbayur), the port for Padang on 10 October 1945. At the same time 4 Brigade with 98 (RB) Field Company RIE under Maj Homewood RE and the detachment of 328 Field Park Company under Lt SK Bodkin RE landed at Belawan, the port for Medan in the north east. In Emmahaven the reception arrangements by the Japanese worked perfectly. A train and a convoy of military vehicles for the trip to Padang some 4 miles to the north were waiting on the quayside. With a nice touch of irony (who can blame the Japanese for it?) the vehicles were all British captured in Singapore in 1942.

28 (RB) Field Company

Padang was normally a town of about 50,000 inhabitants but at the time of the British arrival many had fled to the hills. However large numbers of RAPWI in the town had been brought in by the Japanese from concentration camps in the interior. Divisional HQ was located in the telephone exchange in the middle of the town and the various units were allocated areas of responsibility throughout the town. 28 Company area was in the south alongside the river. The OC selected locations for the various elements of the company including a substantial office building on the river bank for Company HQ. This had an extraordinary sequel. A year later the OC met and married a Dutch girl in Medan. He met his father-in-law for the first time a year after that who, on being shown a map of Padang, announced that 28 Company HQ had been his office in 1913.

At first the Sumatran scene was peaceful and 28 Company quickly settled down to the usual Sapper tasks of improving accommodation, water supply, electricity etc. The Indonesian PWD was co-operative and supplied and controlled its own labour. The Japanese also supplied working parties and these were quite interesting. They would march to the work site impeccably dressed in fatigues, halt, don pairs of snow white gloves and then work like demons. They were out to impress and they did.

The maintenance of electricity and water supply were constant problems. Although as far as possible leaks in the water system were repaired, there was always a shortage and more and more sources had to be located and connected into the mains. Electricity became the province of Lt McKerracher and his PM Platoon. An admirable little Mahratta named Felix from the PWD proved a tower of strength in helping to keep the electricity supply working. He was also remarkably resilient as he involuntarily demonstrated, when he once seized a live wire and neutral at the same time and found himself unable to release either. Although his hair rose discernibly during the episode, when the power was turned off he quickly recovered and was back on duty next day.

Reconnaissances were the order of the day initially. On 24 October Lt Ward with a small detachment of Mahrattas accompanied an overland party to Medan some 500 miles to the north. At the same time Lt Smith with a detachment of Sikhs went to Palembang in the south east. On return both officers reported roads and bridges in poor condition. Soon afterwards these routes came under threat from Indonesian guerrillas and further movement between these centres was almost entirely by air or sea. About the same time the OC went on a recce to Billiton (Belitung), a tiny tin-producing island east of Palembang in the Java Sea. He flew there in an amphibian belonging to the Dutch General Spitz. His return via Batavia in a Japanese plane he had impatiently commandeered on the non-arrival of the RAF, was more hairy. The plane, similar to a Dakota but much smaller was at the last moment, and for the OC's 'comfort', equipped with a rattan chair placed ceremoniously but unsecured in the middle of an otherwise empty fuselage. Minutes after take-off the plane flew into a violent tropical storm and the chair-bound OC found himself momentarily suspended weightless between floor and ceiling. When weight was abruptly restored at the bottom of the "pocket" and within feet of the waves, the chair collapsed creating muffled hilarity and a certain loss of dignity. The climax came when at wave top height the crew began stuffing torn-off strips of sandbag into gaps round the windscreen to stop leaks. They also began donning life jackets of which there seemed to be one short! After that things improved and the OC returned safely. Another interesting recce made by OCs 28 Company and 328 Field Park Company was of a coal mine at Sawalento some miles east of Padang. On arrival they found that access was by means of a large iron bucket carried on a 100 metre wire rope above a deep ravine to a horizontal shaft on the other side. Question of "face" prevented any holding back at this late stage, but had the machinery been stopped halfway the 'sitting duck' situation would have been disastrous. Although at this time the locals may have been still in some awe of the British, the temptation must have been very great. The "fools step in" attitude again paid off, but no more needless risks were taken.

Although the output from the mine was practically nil there were large coal stocks on the dockside in Emmahaven. Following a visit from Lt Col Day, the Coal Adviser to South East Asia, the company was required to supervise the outloading of these stocks to Singapore where it was in great demand. This was accomplished in some haste as the overall situation was becoming noticeably less friendly. An early visit to the railway workshops revealed a well equipped organisation but with one major deficiency; there was a great shortage of wheel bearings and no metal for making more. The rolling stock was consequently literally grinding to a halt. This deficiency was quickly rectified when a coastal gun was discovered in a cave near the mouth of the Padang river. Its ammunition was still with it and the propellant was contained in brass cases. The explosives removed, the cases were melted down in the workshops and bearings produced.

Everyone was happy except the locals who had been using the cordite in their cooking fires! Later when the Japanese were repatriated they arranged a little ceremony. Although it had never been theirs to give, they insisted on formally handing over the West Coast Sumatra Railway complete on signature to the OC who still has it on charge!

At the time of the British arrival the currency throughout the NEI was the Japanese guilder; the Dutch guilder at that stage was unacceptable to the local population. It was not surprising therefore that entrepreneurial instincts caused illicit printing presses to spring into being. One such was discovered in Fort de Kock where a battalion from 71 Brigade was at that time stationed. Lt Ward with a party of Mahrattas was sent to destroy it. This he did with some panache, to such an extent that the battalion CO complained that the resulting spectacular explosion had driven half the inhabitants to the hills. Being honest and perhaps somewhat naïve Lt Ward found that disposal of the spoils posed a problem, as without a suitable furnace fiery destruction of bank notes is not easy. The problem was solved by the RN who dumped the money some miles out to sea - at least according to their official report.

The relatively peaceful state in Padang changed abruptly when the Brigade Major and a Red Cross nurse on a visit to a hitherto well-used beach south of Emmahaven, were murdered. This was particularly tragic since only a few days earlier a military guard near this point was removed as being no longer necessary. The order for the removal had been signed by the BM himself. The response was swift. The perpetrators were discovered, the bodies recovered, the culprits publicly executed and the kampong responsible destroyed. 28 Company's involvement was only in making the coffins.

About this time the Brigade Commander, a good soldier of few words, mostly four letter or derivatives thereof, decided that the increasing display of red and white Indonesian flags and pin-on badges should be *****ing well discouraged. He ordered the local Japanese commander to *****ing well see to it. Within 24 hours all had disappeared. When the Japanese commander was asked how he had achieved this so quickly, he replied that it was really quite simple; those who had flags were forced to eat them, those with badges had them pinned through their noses. The message was immediate and crystal clear.

Sadly the next casualties in the brigade came soon after the murder of the BM and involved 28 Company. A truck with 8 men on driver training strayed beyond the airfield and was ambushed. There were PMs, Sikhs and Mahrattas on board and although two Sikhs escaped and returned some days later nothing more was heard of the vehicle or the remaining men. It was possible that the PMs may have survived because of their religion and even been persuaded to join the Indonesians, but the Hindu Mahrattas must certainly have been killed.

With the increasing tension the brigade perimeter was shortened, wired in as a fortress and guard duties were increased. This considerably reduced the activities of 28 Company particularly as Lt Smith with a detachment of his Sikhs had already been sent to Palembang. The unit itself was relocated to the east of the town in the area which included the hospital and became responsible for that sector.

The Japanese policy of giving military training to selected Indonesians now became manifest. It emerged that, whether by Indonesians or stay-behind Japanese, three week military courses were being run locally, which invariably culminated in a night operation against Padang. The insurgent route usually took them across a wide canal to the north of Padang spanned by a reinforced concrete bridge. 28 Company was ordered to take this bridge out and did so in its usual spectacular fashion.

A further demolition was carried out when the Brigade Commander became impatient with grenade throwing from the market area near his HQ. He ordered that any building from which grenades were thrown was to be destroyed. After the next incident Lt McKerracher was given this task and, true to the reputation which the company had by now acquired, he did so with the usual zeal. When the house was blown the whole row fell down and their roofs were deposited on the top of Brigade HQ in the words of the by then OC, Maj Clarke, "like a drunken sailor's cap". The windows in the HQ were mostly broken and the brigadier's office moved a couple of inches away from the rest of the building. He was not amused but there were no more grenades.

In Emmahaven were large stocks of cement which, in addition to their normal use, were found to make very quick effective and permanent sangars when the cement bags were used in lieu of sandbags and then damped down. The roads within Padang were a constant headache and certainly not constructed to withstand heavy military traffic. Although strenuous efforts were made to repair potholes with concrete, this never succeeded unless whole stretches of road were re-laid. This was quite beyond the available Sapper resources and the bad roads had to be lived with.

Communications between the three main defended areas in Sumatra were by powerful 399 sets manned by Royal Signals which usually worked very well. However, alongside the divisional command net was a Sapper net using 22 sets at company level, working to high power 19 sets at the CRE's HQ in Medan. "Remotes" from these sets fed to telephones in the company offices and messes and speech was always possible in spite of the distances involved. The success of this in 28 Company was largely due to the efforts of the then 2IC Capt Bewlay who "understood these things". Came the day when the divisional 399 net failed and it was a smug bunch of Sappers who allowed the divisional traffic to

pass over the engineer net. On the posting of Maj Sheldon to the CRE's HQ in Medan as second-in-command, Maj CJ Bewlay on promotion took over command of 28 Company until his repatriation and the arrival of Maj SH Clarke. Capt JSR Shave MC became 2IC. Maj Bewlay had a narrow escape when he was ambushed on the airfield road, sustaining a shrapnel wound in his upper arm. Some nights later terrorists felled 39 trees across the same road, which a Sapper platoon with an infantry escort cleared by midday. The company also had the distinction of being the first troops to dismount from ambushed vehicles to engage and inflict casualties on the attackers.

Whilst the main activities of the company were taking place in Padang the OC, as DCRE South Sumatra, still had responsibility for maintenance in Palembang. To this end a detachment from the Sikh platoon under Lt Smith had been sent there. Palembang, located in a hot, flat, steamy mangrove swamp was occupied by a battalion of the Burma Rifles from 5 Ind Div 'supported' by three fully armed Japanese battalions plus a Japanese engineer company. The strong Japanese presence and its retention after the arrival of the British reflects the importance attached to this oil-rich area. Any maintenance that was possible was carried out by the Japanese engineers placed under Lt Smith's direction. He thus had a major under command albeit Japanese. On Smith's repatriation this distinction fell to Lt Raschen who has written an amusing account of his experiences in his book *Wrong again Dan*. On the replacement of the Japanese by a brigade from 5 Division, Lt Raschen and the Sikhs, which were by this time at platoon strength, handed over to the incoming field company and rejoined 28 Company in Padang. The company eventually returned to India in November 1946 where it was renumbered as 18 Field Company.

98 (RB) Field Company

Unfortunately information on this unit, other than where it was and when, is particularly short on detail. Initially under command of Maj G Homewood it arrived in Medan with 4 Indian Infantry Brigade on 10 October 1945. With it was a detachment of 328 (RB) Field Park Company under Lt SK Bodkin; Maj Homewood was also DCRE Medan. In addition to the usual Sapper tasks of helping the brigade to settle in, a particular and urgent task was to extend the fair-weather airfield from 900 to 1400yds so that Dakota and fighter aircraft could land and to make it all-weather. Although the airfield task was under the overall control of a detachment of 458 Forward Airfield Engineers, the labour and plant came mostly from 98 Company and the detachment of 328 Company. The all-weather aspect was provided by surfacing with prebitumenised hessian strip to make it waterproof covered by pierced steel plank to spread the load.

Early in 1946 Maj Homewood returned to the UK and was replaced by Maj P Button who also held the title of DCRE Medan. This responsibility continued

until a British Works Section arrived in Medan some months later when its OC took on the mantle of DCRE.

Medan had a small river flowing sluggishly through it and this had many of the properties of an open sewer. The excellent mains water supply normally came by pipeline from a hill station some 60 miles to the west. As the security situation deteriorated, this water supply became vulnerable to the action of the Indonesians who at first turned it off, then on and eventually off altogether. The provision of an alternative supply was therefore of vital importance. At first it was hoped to do this by making use of a number of deep artesian wells, but these had been put out of action by the Dutch at the beginning of the Japanese invasion. The method of sabotage was to force a rubber plug far down the pipe so that no more than a trickle of water got through. The removal of this plug at first posed a problem until a neat solution was found which consisted of passing a compressor air line as far down the pipe as possible. Turning on the air blew out all the water above the plug and the plug itself, with anything up to 50 psi, behind it, followed with some velocity. However the wells were insufficient to meet the need and the only other water source was the river mentioned above. Clarification of this looked a formidable task but was achieved by 4in pipes perforated at the bottom end, encased in a mesh containing sand and gravel and sunk into a row of holes some distance back from the river bank. When these were interconnected and attached to a pump, water drawn through this filter system emerged tolerably clear. Meanwhile the municipal swimming pool was subdivided into settling and chlorinating tanks and water pumped through there to the mains gave a very adequate supply to a limited military and RAPWI distribution. The downside of this was that the swimming pool became a target for Indonesian mortar attacks, during one of which Spr Milkha Singh was killed and five others wounded.

In August the company stock reached a high point when it took over an Indonesian-run ice factory just outside the brigade perimeter and thereafter provided a much appreciated commodity in liberal quantities.

In its various tasks the company frequently came under fire and during an attack on the unit lines on 31 May, Lt Honeywell and Hav Achha Singh in one of the company Bren-gun posts were wounded. Lt Honeywell was evacuated to the UK. Interspersed with airfield, road and rail repairs, accommodation improvements and maintenance of the water supply the company also took on responsibilities, under Lt Tickell, for the training of newly formed Dutch Pioneer Platoons. In addition detachments of up to platoon strength accompanied infantry operational columns into the surrounding countryside. Few days or nights passed when small arms fire and frequently the crump of heavier weapons could not be heard from within the Medan "fortress". The unit returned to India in November 1946.

328 (RB) Field Park Company

328 Company under Maj GW Launder less a detachment under Lt SK Bodkin arrived in Emmahaven with HQ 26 Ind Div on 10 October 1945. Moving immediately to Padang it quickly settled in and began activating its workshops and setting up an Engineer Stores Depot (ESD). At the same time Lt Bodkin and his detachment arrived in the port of Belawan en route to Medan, together with 98 Company. In Padang, as part of the process of setting up the ESD, a cement factory at Indaroeng near to Padang was inspected and large stocks of cement were discovered in a godown at Emmahaven. On 20 Oct the OC together with OC 28 Company carried out the recce of the coal mine at Sawalento already described in the report on 28 Company. On the return journey from this recce a Dodge 15cwt, part of the 328 Company escort, overturned killing Spr Pratap Singh and injuring three others. These were the first engineer casualties in Sumatra.

On 24 October the OC accompanied the overland recce party to Medan. From there he flew to Singapore to sort out some of the problems which had arisen due to many engineer stores having been sent to wrong destinations throughout the NEI. Following this visit much exchange of stores took place, including a large consignment of copper sulphate for water treatment which arrived in Belawan marked "SECRET"!

Whilst on his own in Medan Lt Bodkin fed in 98 Company officers' mess but otherwise lived with his detachment some distance away. Returning one evening to the detachment, his vehicle was ambushed by a band of armed women and the vehicle ended up in a ditch. Being physically fit and swift of foot, both Bodkin and his escort escaped unharmed. Returning to the scene shortly afterwards with a recovery vehicle and a posse of suitable size, he discovered that the wheels had already been removed from his truck. However this proved the least of his problems for by the following morning the local Indonesian newspaper was accusing him of rape. So emphatic and detailed was the accusation that Bodkin was called upon to explain himself and was having a hard time doing so when fortuitously a very similar incident happened to another officer and the cunning Indonesian attempt to discredit British forces was exposed.

Removal of vehicle wheels became a speciality of the Indonesians and few areas were safe. The CRE's car was maintained by 328 Company and whilst it was being prepared for his wedding (he married a Dutch girl as did his 2IC Maj Sheldon) it too had its wheels stolen. On return from his honeymoon his jeep, parked behind his bungalow with a guard at the front gate, was found one morning resting on its brake drums.

On 16 November HQ 26 Div moved to Medan accompanied by 328 Company, leaving a stores detachment under Lt de Waal in Padang under command of 28

Company. Heavy vehicles and bulldozers moved by sea but the remainder of the company travelled overland, taking six days over the journey. On arrival in Medan the company again quickly settled in, but the security situation was already becoming tense and within days the unit again had to move to an area within the brigade defended perimeter. Stores were constantly arriving in Belawan which necessitated taking over godowns on the docks and manning these with a permanent detachment. In Medan itself the workshops personnel were augmented by 16 local Chinese artisans. Meanwhile in Padang a sapper in de Waal's detachment shot and killed a civilian caught out after curfew and Spr Babu Wakade was accidentally shot and seriously injured.

Maj Launder was repatriated early in January 1946 and was replaced by Maj ADM Dunne who remained with the company until its return to India in November 1946. By this time an ESD of about 2000 tons capacity had been established in what was a fairly cramped unit location in a poor quarter near the town centre. It was here that a building housing unit equipment on the ground floor with troops in the room above collapsed, putting many of the Stores Platoon out of action. On the plus side it was found that, as with many units in a similar situation during the war, the amount of equipment able to be written off, far exceeded what could possibly have been housed in the building which collapsed. Soon after this event a British battalion was repatriated to the UK and 328 Company was able to move into the battalion's more salubrious quarters in a school. This was not to be the last move however, as two months later the company again moved into a one-time gaol on the road to Belawan totally enclosed in a high wall which proved admirable from the security viewpoint.

The ignorance of some British officers unaccustomed to the habits of Indian troops was demonstrated one day by the RAF officer in charge of the airfield. He was incensed to find the Sikh stone crusher party eating their food in the shade beneath the wings of one of his aircraft. His boundless rage was based on the grounds that the Sikhs might smoke and set fire to his aircraft. He was unaware that the PMs and Mahrattas customarily smoked the Sikhs' ration of cigarettes, whilst everyone else drank the PMs' liquor ration. An amusing incident occurred one day when the sweeper responsible for the officers' deep trench latrine, which was incidentally a very fine and much admired edifice, decided to burn off the excess toilet paper with petrol rather than the more benign diesel usually reserved for such purpose. The resulting explosion demolished the structure and left the sweeper much wiser but with a permanent limp.

The officers' mess was also bedevilled by an offensive polecat. It was a sneaky animal which lived in an inaccessible part of the roof. Choosing its moments it would descend, cause mayhem and then retreat to its stronghold. Eventually however it died in its den where, in the heat of the tropics, it rapidly became even more offensive until, after much effort, its corpse was finally removed.

Although not engaged in anything particularly spectacular during its stay in the NEI, 328 Company was undoubtedly the engineer unit in Sumatra upon which, for a long period of time, the greatest demands were made. These demands were always met on time with good grace and great humour however outrageous they may at times have seemed. For this the OC Maj Dunne was awarded a well earned MBE.

Although not directly applicable to any engineer unit the following is worth recording: By mid-August 1946 the railway to the port, still under Indonesian control, was falling into a sad state of repair. Many released Dutch civilians who pre-war had worked for the Deli Spoorweg, as the line was called, remained in Medan. It was therefore decided that the Dutch should run the railway. Accordingly a plan was hatched between the CRE and the Dutch railway officials and, after ensuring that as much rolling stock as possible was either in Medan or Belawan, the seizure took place. It was then decided to move the rolling stock in Medan to the dock area in Belawan. Two trains, each with a Dutch crew, were assembled for the journey, the second to run some minutes after the first. Alas, the leading train ran out of steam and drew to an unscheduled halt just round a sharp bend. However the second train was full of puff and had been gradually, but unknowingly, gaining on the leader since leaving Medan. The lead train was invisible to its follower because of the dense jungle and winding track. Before it could be stopped the second train rounded the bend at full speed and the resulting crash derailed most of the rolling stock in both trains and badly damaged the track.

ROLL OF HONOUR

20 Field Company

Killed:	Nks	Babu Chikna, Karten Singh
	LNks	Shrinant Kharche, Chet Singh
	Sprs	Bhimrao Kadan, Amrut Rale, Ghulam Farid, Mohd Fazal
Wounded:	Jem	Laxman Dhan
	Nk	Mohd Abbas
	LNk	Matrha Singh
	Sprs	Mohan Khan, Allah Ditta, Abdul Rehman, Mohd Sadiq, Fazal Karna, Karta Singh, Dura Singh

OFFICERS WHO SERVED IN NEI

20 Field Company	Maj	EC Fisher
	Cpts	Hartley, JF Cull MC
	Lts	JP Osborne, Corking, Pearson, Holmes, BH Thomas
24 Field Company	Majs	JH Preston, I Feather
	Capt	P Henwood

28 Field Company	Majs	WL Sheldon, CJ Bewlay, SH Clarke
	Capt	JSR Shave MC
	Lts	DJ Ward, J Smith, AJ McKerracher, DG Raschen, D Tickell
	Sub Jem	Vikram More Kondi Lawond
91 Field Company	Majs	J Beddows, RWBP Chambers, HA Mavor
		JR Hudson, PM Leslie-Jones
	Cpts	HE Allison, R Ross, R Bainbridge, WLG Hammett
	Lts	GM Allchurch, A Chapman, RAW Cochrane, RKL Thomas, Tonge, JR Whitworth
98 Field Company	Majs	G Homewood, P Button
	Cpts	I McEwan, FR Honeywell, RI Northern, Coulter
		RTM Hamm, CA Paterson, JB Osborne, D Tickell
	Jems	Shivram Lawand, Atmoram Ghosalkar
328 Field Company	Majs	GW Launder, AJM Dunne
	Cpts	D Stanley, SK Bodkin
	Lts	AL Fookes, RF de Waal, Mason, Prosser
	Sub	Jijaba Bhosle

HQ 458 Forward Airfield Engineers	
CRE	Lt Col Griffin
Adjt	Capt AC Cook
FE1	Capt JA Pymont
FE2	Lt I Nortten
QM	Lt W Gould

The above list is believed to be accurate, but is based on limited information available.

Compiler's Note on Sources

The framework for this account is based upon the War Diaries of the units concerned. The infill to this framework has been provided by liberal use of *The Indian Engineers 1939-47* by Lt Col EWC Sandes, *Sumatra 1945-46* by Maj JSR Shave MC published in the RE Journal, *Wrong again Dan* by Col DG Raschen OBE, together with the memoirs and memories of the following who were there:

Col SH Clarke
Lt Col WL Sheldon
Maj GW Launder
Maj CJ Bewlay
Capt SK Bodkin
Capt I Feather
Capt JP Osborne - whose widow has kindly permitted the use of an audio tape produced by Capt Osborne
Capt JP Pymont
Capt DJ Ward

CHAPTER TWENTY-FIVE HONG KONG

Compiled by Lieutenant Colonel DL Jones

96 (RB) INDIAN FIELD COMPANY

As the Japanese launched their treacherous attack on the American fleet at Pearl Harbour at 7.50 am on 7 December 1941, their army crossed the land frontier of Hong Kong north of Kowloon. This was the only remaining British foothold in China and some 1500 miles north-east of Singapore.

No Indian Sappers and Miners were in Hong Kong at that time so there is no place in this history for the details of the heroic defence put up by the garrison. They fought under hopeless conditions and without the remotest possibility of reinforcement. Nor should this narrative dwell on the looting, rape and murder in which the Japanese troops indulged after the exhausted British garrison surrendered on Christmas Day 1941, just 18 days after the Japanese invasion.

Following the collapse of Japan in August 1945, a mixed force under Maj Gen FW Festing was detailed for the reoccupation of Hong Kong. This force, to be known as Land Forces Hong Kong (LFHK), sailed from Madras at the beginning of November 1945. It contained no armoured or artillery elements and initially the infantry element was 3 Commando Brigade, consisting of 1 and 5 Army Commandos and 42 and 44 Royal Marine Commandos. Later, as the Army Commandos wasted down from demobilisation and repatriation, 1 and 5 Commandos first amalgamated and finally disbanded, to be replaced by 45 RM Commando from UK. In due course the Commando Brigade was replaced by an Indian States Forces Brigade consisting of battalions from Jaipur, Jodhpur and Travancore. There was a considerable Indian element in LFHK, from the outset, particularly in the administrative services. RIASC provided Supply Depots and a tipper company, IAOC an Ordnance Depot, IEME a workshops and IAMC a CCS, though there was also a BMH. The Military Police element was relatively high, in order to cope with the control of high-spirited revellers from visiting ships, demobilisation and repatriation celebrations and similar jollifications. The Force's engineer support was provided by 96 (RB) Indian Field Company, under the command of Maj GB Dawson. There was a Chief Engineer in HQ LFHK but no intermediate engineer level of command such as a CRE.

At the end of the war on 15 August 1945, 96 Company was in Pattenca near Chittagong, carrying out collective training. The war diary does not make clear the nature of this collective training but from a comment made by Maj WPV Wakley, who joined the company as a subaltern in October 1945 from an RBS&M

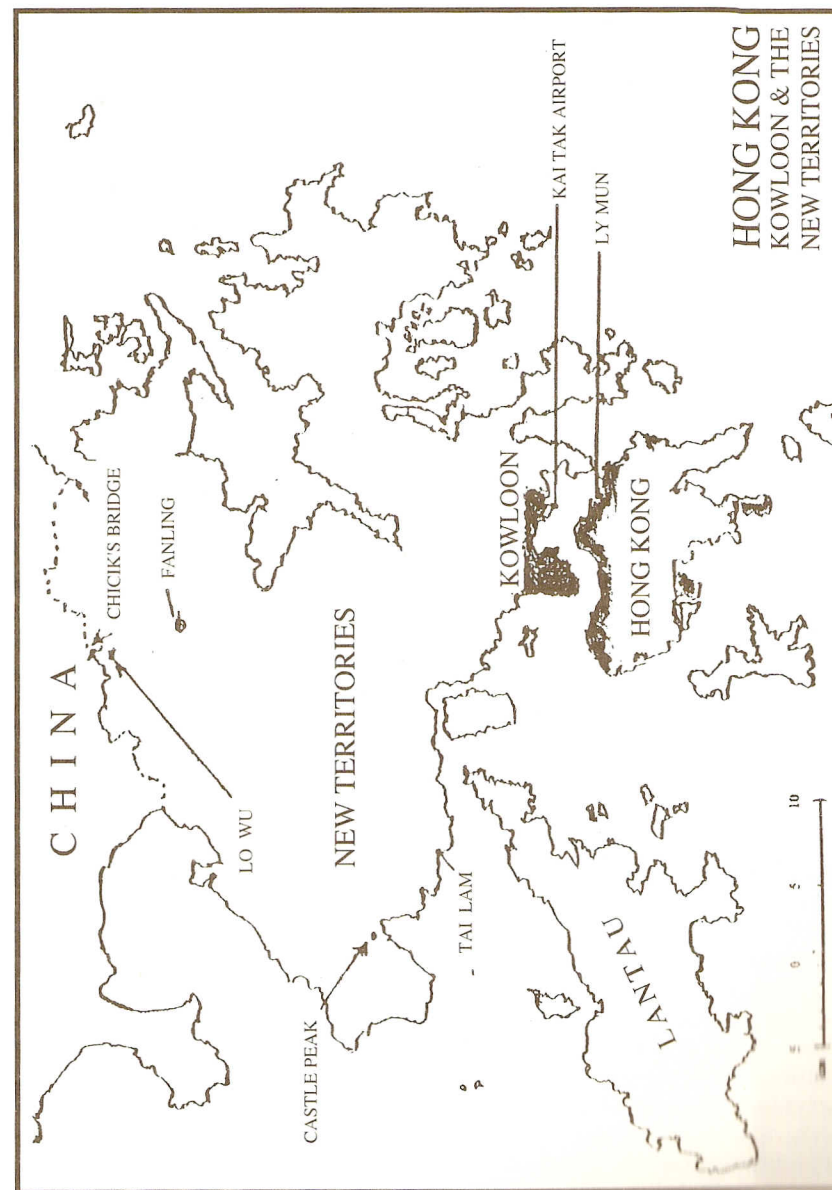
PLO appointment it seems likely that it was to enable the company to give engineer support to 3 Commando Brigade on Operation "ZIPPER", the invasion of the West coast of Malaya. As described in Chapter 21, the sudden end of the war made "ZIPPER" unnecessary (although some parts of the plan were used at Morib and Port Dickson, these did not involve 3 Commando Brigade).

At the beginning of October 1945 96 Company entrained and moved to Madras and on 2 November sailed for Hong Kong in HMT *Dunera*, leaving Lt Wakley to follow in a Liberty ship with the company's transport and unit equipment. The Liberty ship called at Singapore and did not reach Hong Kong until nearly a month after the company. Despite the difficulties which this delay must have caused the company in carrying out its role initially, they coped well and earned high praise for their ability to improvise. The officers and VCOs in the company were as listed at the end of this chapter. As demobilisation and repatriation had their effects, the holders of some appointments changed.

At first the company was located in Ly Mun Barracks on Hong Kong island, opposite the eastern entrance of the harbour and Kai Tak airport. During their seventeen months in the Colony their tasks were to vary from renovations and repairs to existing barracks, roads and bridges, to building new bridges and hutted camps. For their first tasks of renovating the existing pre-war barracks on Hong Kong island, they worked in small parties, often having to improvise because of the lack of materials available in the Colony in the early days and the delay in the arrival of their unit stores and equipment. Even the officers had to make their contribution; Lt Watson recalled them sitting round a table in the Mess after dinner, under the guidance of Lt Welsh, making putty for the windows by crushing lime, mixing it with linseed oil and "kneading it forever". In addition to the damage resulting from the Japanese invasion and occupation, the barracks had suffered extensive looting by the local Chinese population during the interregnum (and indeed looting remained a problem for some time after the arrival of LFHK). The work required covered almost every form of refurbishment including water supply, drainage systems and electrical installations.

Maj Wakley relates the story of an improvised company latrine built from 9in SGSW T-connections inverted and connected in line before joining the main sewerage system. The whole was cleared by an automatic flushing device consisting of a 20 gallon tank pivoted just below its centre of gravity. It was first displayed in action with a rolling rumble as the Subedar was handing over the evening muster parade for mepacrine to the OC. Such was the discipline that nobody giggled - but there was a palpable quiver in the ranks - when the OC said "Wakley Sahib ka bandobast chalagaya hai. (Wakley Sahib's device has worked)."

Many of the pre-war barracks, being in Hong Kong, were in the wrong place for the Force to carry out its main task, which was to police the frontier (in the New Territories) between Hong Kong and China, and the coastline, estimated



at over 100 miles long. The Chinese National Army was being evacuated through Hong Kong and fed back north in US landing ships, and this raised a variety of problems caused by deserters, looters and similar undesirables. There was thus a shift in emphasis in the company's workload from Hong Kong island to the New Territories. The first sign of this came in December 1945 when Lt Welsh took a section over to the mainland to repair a Japanese-built timber bridge over the river Sham Chung at Hung Tung. The original bridge had been blown in 1941, in such a masterly fashion that the remains of the RC roadway was left lying in the river-bed, upside down and re-aligned by 90 degrees.

Early in the New Year (1946) the company was given its first major task, the construction of a 110ft double/single Bailey bridge across the river at the same location. The task was given to Lt "Chick" Welsh and his Sikh platoon (who sadly had just lost Spr Bau Singh, killed when handling an unfamiliar Japanese explosive device on 29th December). Lt Welsh's design of the new bridge was constrained by the need to keep the existing bridge in place as long as possible in order to keep the frontier open. This meant building the Bailey bridge at high level which necessitated jacking down to long approach ramps.

Maj Wakley recalls that "the date chosen for building was a Sikh holiday so the job fell to my Mahrattas, with the proviso that the frontier would be closed at 1800 and must be open again at 0600. The building of the bridge went smoothly apart from the final jacking-down when we ran into some incompatibility between components of British and American origin, which entailed a bit more jacking and packing. Dawn came and we could see the transport stacked-up on the Chinese side until it faded away in the hills on the horizon. By 0600 the transport was rolling past the signs which read: "Chick's Bridge. Built by 96 Field Company, Royal Bombay Sappers and Miners". The name became part of the local vernacular; it was weird to overhear some locals talking, much later, and to hear the words "Chick's Bridge" in the middle of their conversation." The bridge remained in place for some time; many years later a photograph of it appeared in a Sunday paper magazine with the caption "A rusty Bailey bridge sags dejectedly across the frontier." Evidently the Public Works Department had not done their job on its maintenance in later years.

The engineer stores organisation in Hong Kong at that time was run by the RAF (an example of the inter-Service co-operation evident in many fields in the Colony then) and when the company went to draw the bridging stores, the OC Stores said that he had never seen such equipment in use; could he watch the construction? The company readily agreed and invited him to eat with them beforehand; he was delighted when told the meal would be Indian curry. In the event it was a very spicy fish curry which he greatly enjoyed, the sweat "fountaining from his forehead". On such bases are many friendships founded - and future favours assured.

Although the company carried out further bridge repair jobs during the next few months, their main workload became improvements to accommodation in the New Territories and construction of new hutted camps there. After finishing Chick's Bridge, the Mahratta platoon moved to a beautiful bay called Tai Lam Chung where they were joined by the PMs of No 1 Platoon. They pitched their tents on the concrete slabs of some old mule-lines. Their first task was the rehabilitation of a large building known as "Castle Peak Cafeteria" for occupation by 45 RM Commando which was coming out from UK to replace the amalgamated (later disbanded) 1 and 5 Army Commandos. Meanwhile the rest of the company also moved over to the mainland to Lo Wu Camp to start work on renovating Fanling Barracks and the San Wai camp site.

Soon after this, towards the middle of February 1946, some changes took place within the company following the departure of Maj Dawson to UK on repatriation. He was succeeded by Capt Pringle on 11th February on promotion to major, and Lt Welsh became 2IC on promotion to captain. Lt JP Kingston took over No 3 (Sikh) Platoon.

Once the work on the Castle Peak Cafeteria had been completed, Nos 1 and 2 Platoons started erecting Nissen huts to replace their tents, the Tai Lam camp being intended for occupation by a battalion on completion. This work made good progress and the two platoons had enough of the hospital-type Nissens built to accommodate themselves - the first time, it was said, that they had not been under canvas since they were formed up in Wana.

Construction was held up, however, by their first experience of a typhoon which struck the Colony in May 1946. The highest wind speed was a gust of 105mph and on a half-completed hut it rolled back the CGI cladding like the top of a sardine tin. The gust blew in the ventilators over the doors in one of the jawans' huts and went out at the other end, cracking the 9in brick piers supporting the doors. Down in Kowloon, a petrol tank under construction was crushed like a condensed-milk tin. The typhoon gave rise to an incident which illustrated the relationship between the British officer and his jawans in a touching way. As the typhoon died away, Lt. Wakley rode his motorcycle round to the other side of the bay to see if the Commando which had moved into the Castle Peak Cafeteria needed any help, but they were in a more sheltered position than the Sappers. As he dismounted on his return, he asked his jemadar, Balkrishna Kadam, why the jawans were not eating their khana. The reply was "we would not start until we were sure you were safely back." Wakley was obviously very moved by the loyalty of the jawans and by the empathy he and his brother officers enjoyed with them. He recalls "the Mahrattas were very conservative in their approach and when I first took over the platoon I did my best to get to know them. After about a month I noticed that when returning the salutes of jawans of the other two classes with the greeting appropriate to each, I was getting 'Ram Ram' in reply. I felt then that I had made it!"

On completing the camp at Tai Lam in mid-June the two platoons carried out some training (the war diary does not specify its nature) before joining the rest of the company on work at San Wai camp, Fanling. Jem Bhagat Singh left the company to return to Kirkee for release on completion of his engagement at about this time and was succeeded by Jem Nasib Singh. The company set up in effect a production line for building the hospital-type Nissens and pre-fabricated timber huts that were to make this pre-war tented camp into hutments. The company set up its own rock-crushing plant which provided all the aggregate for the foundations and floor slabs. This construction task with that at Lo Wu for a Chinese Cadre Company and further work required back at Tai Lam, together with miscellaneous tasks like road-widening and repair, kept the company fully occupied for the rest of their time in Hong Kong.

In November 1946 Capt Welsh left the company on repatriation and was succeeded by Capt JP Osborne from 98 Field Company (which had just left Sumatra). Capt Osborne arrived just at the moment when the first moves towards the restoration of peacetime accounting were being made. This was not generally regarded as good news as it meant, for example that every drop of petrol had to be accounted for, every item of stores controlled.

It might be thought that with the company situated for most of its time in the Colony in the New Territories, its members would have enjoyed very little in the way of a social life. But as Maj Wakley pointed out, one's social life was very much what one cared to make it. Having worked at one time or another on improving the accommodation of so many different units, the company was well-known and received invitations at all levels as a result. From the time the Force first arrived in the Colony, the expatriates had been flooding back and the emphasis was very much on getting the world of commerce turning once more. The expatriates were very "pro-Service" and through the staff of LFHK the various units received from them plenty of offers of hospitality, even those more remotely situated in the New Territories. The presence of a BMH and its quota of QAIMNS nursing sisters meant that any jawan admitted to hospital for any reason would not go short of visits from his officers. Watson also recalls that the detached platoons used to be visited by FANYs with some sort of welfare van. "The reverend gentleman who was mullah in the PM platoon had one word of English greeting, and knowing the formal rank of nursing memsahibs would hail them in stately fashion "Hi Sister!" It has been mentioned that the Commando Brigade was eventually relieved by a States Forces Brigade. One of the Maharajas took over two floors of the Peninsular Hotel and gave a momentous party to all the officers of the Garrison. "All this contrasted with what we had managed out on detachment in the early days," recalls Maj Wakley, "so short of transport were we that we had only a water truck and a motorbike. The two subalterns, with an orderly (with Sten gun) perched on the back used to drive to Kowloon and cross the ferry to sample the local restaurants. There one could eat in the way of almost any country in the world, but we badly needed the change from our jawans' food, until we finally got a Christian cook!" Watson recalls

that meanwhile he and Wakley "got little further than reading out a recipe for cauliflower cheese from a tattered copy of Mrs Beeton, Wakley, whose Urdu was better than mine, translating it and his orderly cooking it. The result wasn't very good in the absence of cauliflower, for which we substituted Chinese leaf!"

Wakley goes on to relate that "the horse-racing was starting both in Hong Kong and at Fanling for those who enjoyed it. There was swimming for most of the year and we had a Kamikaze boat which we powered with a No 4 Pumping Set engine."

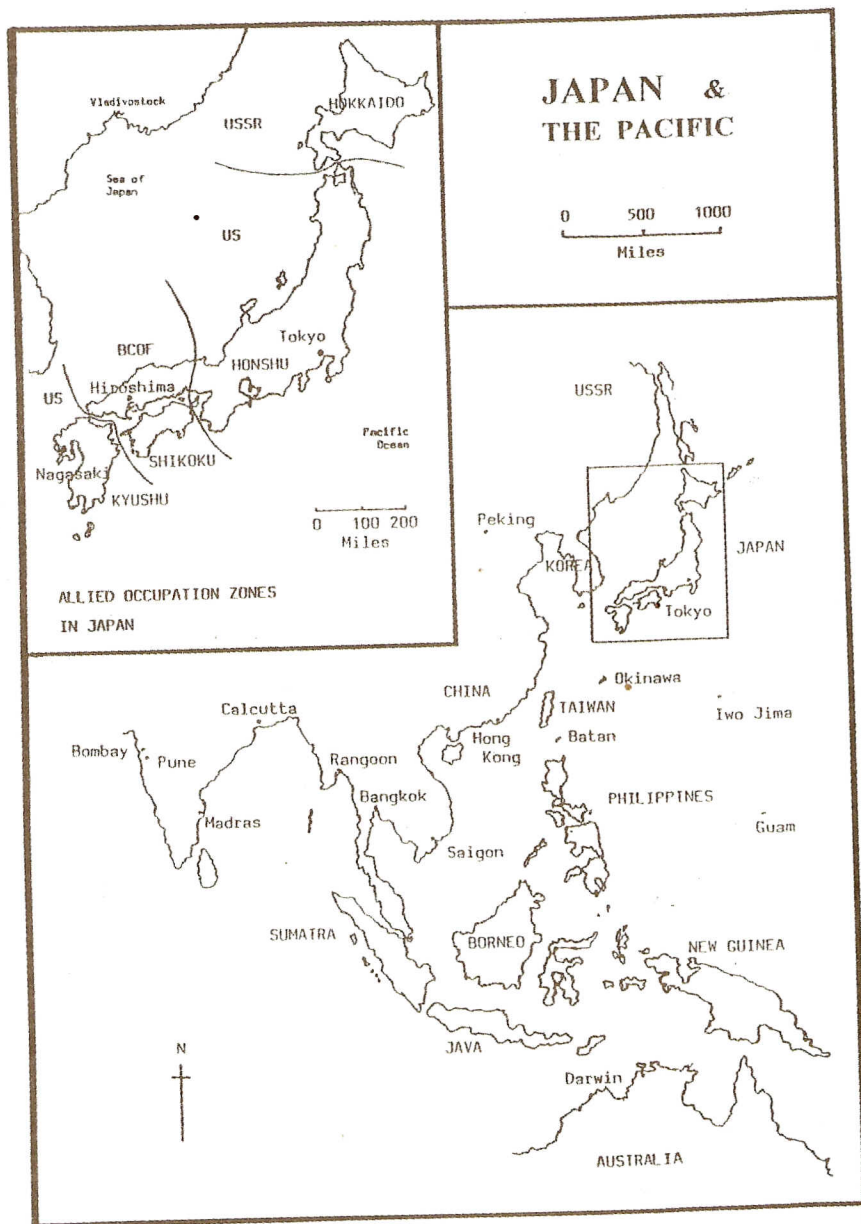
So although the company was kept busy during its time in Hong Kong, life had its lighter moments. Nevertheless the time came for the company to return to Kirkee for eventual disbandment. Lt Wakley had left the company in January 1947 to attend a Regular Commissions Selection Board in India, so was not with them when they sailed from Hong Kong on 6th April 1947 in *SS Empire Pride* for Madras. Capt Osborne remembered that they were not enthusiastically received when they arrived there and he even had to commandeer the troop-train which took them to Kirkee where their reception was very different. The disbandment of the company started soon afterwards and was complete in July 1947. Lt Wakley did not rejoin the company after his successful appearance before the Regular Commissions Board but was posted to 21(RB) Field Company in 4 Divisional Engineers, based at that time in Poona. Capt. Osborne was particularly unfortunate. Having reached the Homeward Bound Trooping Depot (HBTD) at Deolali and then embarked in a UK-bound troopship, he was then disembarked - on a stretcher - when it was discovered that he had polio. He subsequently spent the next year still in the Army, in hospital.

OFFICERS AND VCO'S IN 96 FIELD COMPANY IN HONG KONG

OC	Majs GB Dawson, KStC Pringle
2IC	Cpts KHStC Pringle, CB Welsh, JP Osborne
HQ Subaltern	Lt A Martin
MO	Capt M Sopher IAMC
No. 1(PM) Pl	Lt PTC Watson
No. 2(Mah) Pl	Lt WPV Wakley
No. 3(Sikh) Pl	Lt CB Welsh, Lt JP Kingston
Subedar	Apaji Bhosle
Jemadars	HQ Mahomed Fazal; No 1 Pl Asgar Shah;
	No 2 Pl Balkrishna Kadam; No 3 Pl Bhagat Singh,
	Nasib Singh
	Peploe
	Name not available

COMPILER'S NOTES ON SOURCES

The key dates, place names and similar details are taken from the 96 Company war diary for the period January 1945 to January 1947. The majority of the narrative describing the activities of the company whilst in Hong Kong is derived from the personal anecdotes of Maj WPV Wakley RCT (Ret'd) and Peter Watson, and a tape-recorded account given by the late Capt JP Osborne and quoted by kind permission of his widow.



CHAPTER TWENTY-SIX BRITISH COMMONWEALTH OCCUPATION FORCE JAPAN 1946-1947

363 (RB) INDIAN FIELD COMPANY

Compiled by Lieutenant Colonel DL Jones

Following the end of the war on 15 August 1945, the ultimate triumph of the Allies came with the occupation of Japan itself. This was carried out by a multinational force commanded by the US Gen Douglas MacArthur, the Supreme Commander Allied Powers (SCAP). The occupying force had two main tasks; the first was to destroy Japan's capacity to make war, the second was to introduce democratic principles to a nation hitherto knowing only an autocratic regime.

With considerable wisdom, two decisions were taken: to allow the Japanese Government to co-operate, and to maintain the prestige of the Emperor. As a result, the Allies were able to speed the process of disarmament. The Government rapidly abolished its General Headquarters and disarmed and demobilised the armed forces stationed in the country. Those outside Japan were dealt with by local Allied commanders and returned to Japan for demobilisation and return to civilian life as soon as possible. This task was largely accomplished within six months of the end of the war. The Occupation Force's second task, that of introducing democratic principles, was to take longer.

Initially General MacArthur's occupation force was entirely American. He had intended it should always be so, to make the Japanese feel they had lost the war to the Americans. The Australians, however, were equally determined that their contribution to victory in the Pacific should be recognised by their participation in the occupation. Both Americans and Australians seemed united in wanting to ignore the contribution of any other part of the British Commonwealth; in particular they regarded the British-Indian endeavours in Burma as a comparatively minor sideshow which had as its only object the opening of the supply-line to the other major ally, China. MacArthur's attitude on this subject was reinforced by the views of other senior US commanders in the Far Eastern theatre such as General "Vinegar Joe" Stilwell, whose anti-British feelings were well-known. The British Government were keen that a contingent representing the Commonwealth should be included in order to restore its prestige in the Far East which had been so badly damaged when Singapore fell. Eventually both the Americans and the Australians had to accept the participation of a British-Indian contingent in the occupation force because it enabled their own manpower commitments to be substantially reduced, as demanded by political pressures both in the USA and Australia. Even so the

size, composition, location and responsibilities of the British Commonwealth Occupation Force (BCOF), as it came to be called, were the source of much argument between the Governments concerned and this caused a delay of several months in the deployment of the Force, with a certain lowering of morale amongst some units selected. The political wrangling and resultant inter-governmental horse-trading causing this situation are fully described by Peter Bates in his excellent book *Japan and the British Commonwealth Occupation Force 1946-52*. One important feature which emerged was the American insistence that all aspects of the military government of Japan remained in US hands even in the area allotted to BCOF, which thus had a largely military and non-political role with little opportunity to influence the democratisation of the Japanese except by example.

Although Gen MacArthur's occupation force remained mainly American the British Commonwealth element (BCOF) was to consist of 35,000 men commanded by an Australian, initially Lt Gen J Northcott and later Lt Gen HCH Robertson. Direction of the Force was to be by the Joint Chiefs of Staff, Australia (JCOSA) and Australia had the responsibility of maintaining the Force. Australia provided 11,000 men, UK nearly 10,000, India about 9,600, and New Zealand about 4,000. In addition to elements of the Royal Navy and squadrons from the RAF and RIAF, Great Britain and India were represented by a British-Indian division of two brigades, and other supporting troops. India provided many of the technical and administrative troops in the British Commonwealth Base (BRITCOM Base), and eventually her contribution represented about 29% of the strength of BCOF, which had risen to 37,000 by the end of 1946.

The division, under the command of Maj Gen "Punch" Cowan, the famous commander of 17 Ind Div during the Burma campaign, consisted of British and Indian units selected from 36 Indian and 2 British Divs. 268 Indian Brigade, under the command of Brig KS Thimmaya, consisted of 5/1 Punjab Regt, 1/5 Mahratta Light Infantry and 2/5 Royal Gurkha Rifles. Strangely, the Mahratta battalion had fought the Germans (in Italy), but not the Japanese. The British 5 Brigade consisted of the 2nd Bn The Dorset Regt, the 1st Bn The Queen's Own Cameron Highlanders and the 2nd Bn The Royal Welsh Fusiliers. It can be seen that these infantry battalions each represented a different recruiting region in their respective Armies. Among the divisional troops were the 7th Light Cavalry IAC, 30th Field Battery RA and 16th Indian Field Battery RIA, whilst the Divisional Engineers, under the command of Lt Col HB Calvert, comprised 5 Field Company RE, 21 Field Park Company RE, 429 (QVOM) Indian Field Company and 907 Indian Works Section.

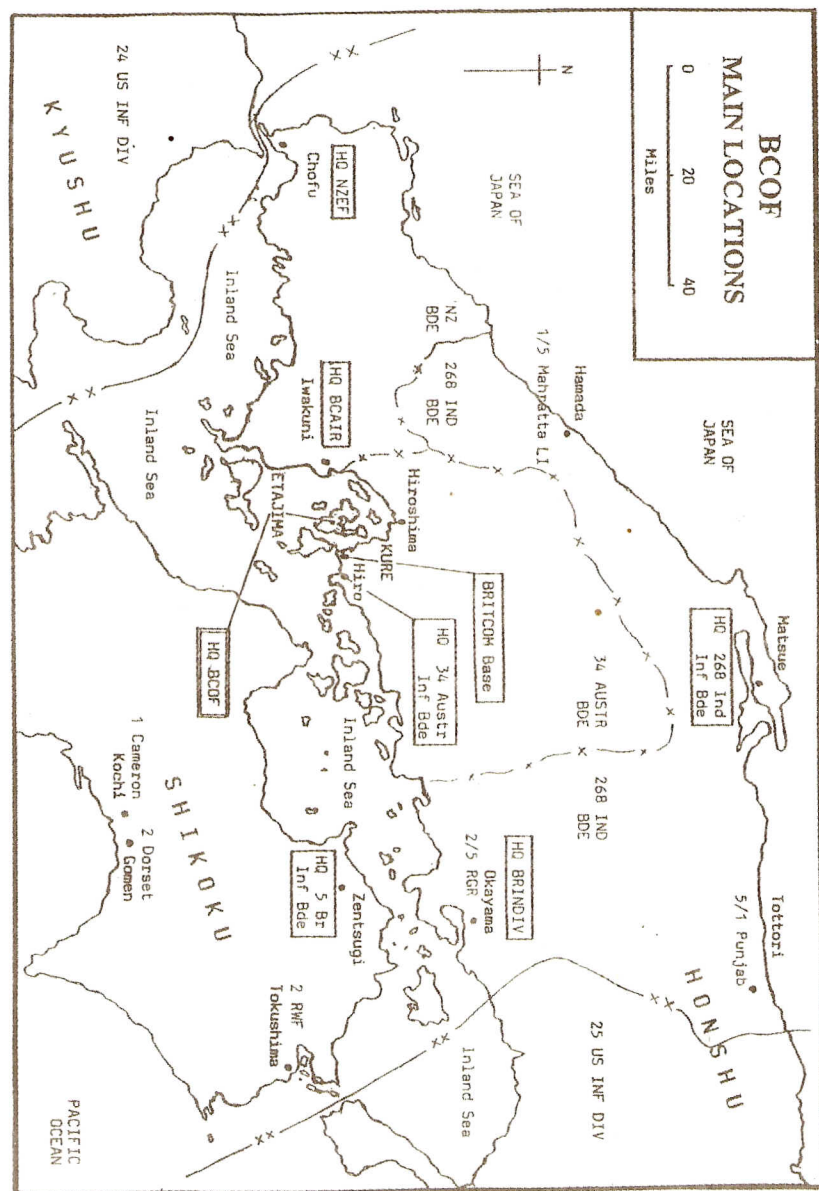
The division was initially designated "BRINJAP" but was later re-designated "BRINDIV". With the additional Indian units supporting BCOF, the division started forming in Nasik in November 1945. Their departure for Japan was delayed twice and although an advance party left in February 1946 and a contingent of 1000 arrived in Kure in March to prepare for the arrival of the

main body, the rest of the Division and supporting troops did not arrive until 5th April or 19th May 1946. Included in the BCOF supporting troops was 363 (RB) Indian Field Company, who were warned in January 1946 that they would be joining the Force.

At the end of the war, 363 Company was part of 457 (RB) Forward Airfield Engineers and was working on the airfield at Zyatkwine in the Pegu area of Southern Burma, having leap-frogged its way down Burma with the other units in 457 FAE. In September 1945 they had been warned to take part in Operation "Masterdom" which involved accompanying 20 Ind Div to Saigon in French IndoChina, but their part of the operation was cancelled. After this disappointment they continued to work on the airfield until they moved to Pegu in November. In January 1946 came their orders to join the BCOF contingent assembling at Nasik and on 31st January they embarked from Rangoon for India.

It is not known whether in fact the company did go to Nasik - it is more likely that Group HQ at Kirkee prevailed upon the powers-that-be to allow them to go to Kirkee to prepare for their new role. Certainly the company re-formed and re-equipped totally and did so in Kirkee, under the command of Maj RP Roche. The need to re-form the company was not surprising. It had been formed as a Chemical Warfare (Mortar) Company in 1942 but was converted to a field company soon afterwards and sent to the Arakan. Many of its officers and other key personnel would have been nearing the time for their release or repatriation by the end of 1945, and the company as a whole had been kept busy throughout their operational service. When they finally sailed for Japan it was with a completely new complement of officers and many "new" jawans. These were supposed to be "the very best" on offer from other units disbanding in Kirkee at the time, with suitable discharge dates. The officers are listed in at the end of the chapter. They all met together for the first time on the ship that took the company to Japan. The officers' appointments changed later as repatriation and release took their toll.

The company embarked at Bombay in SS *Carthage* with other units of the Force, and disembarked on 19 May 1946 at Kure, which was to be their base for the whole of their time in Japan. They came under the command of 17 (Australian) CRE who was responsible for engineer support and works for the units of the BRITCOM Base in the area of Kure and Hiro. The Order of Battle of 17 CRE is also shown at the end of the Chapter. HQ BRINDIV was located in Okayama, about 100 miles further east and initially all works in the Divisional area were the responsibility of CRE BRINDIV. About 40 miles north-west of Kure is Hiroshima, the site of the explosion of the first atom bomb on 6 August 1945. Even nine months later the effects of that bomb were all too apparent. Kure having been the largest Japanese naval base had also suffered severe and extensive damage, but from Allied conventional high-explosive and incendiary bombing in the latter months of the war so that much of the place had been reduced to rubble. The damage was described by Lt Col Sandes "the scene at Kure was

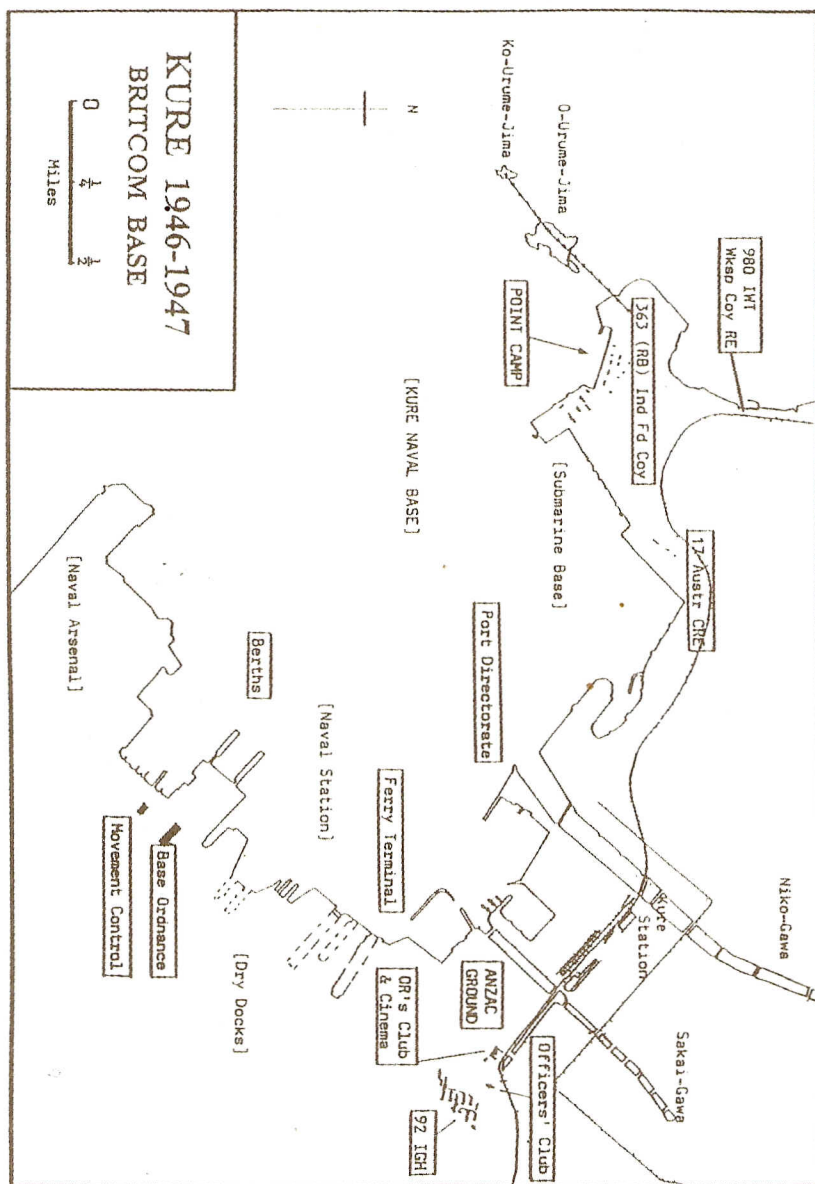


one of extraordinary desolation. Large Japanese warships lay aground, wrecked and abandoned, while all naval structures in Kure and along the Inland Sea were mere masses of twisted steel."

This contrasted starkly with the pretty islands and coastal villages backed by mountains which the troops had seen from their ships as they entered the Inland Sea between the main islands of Honshu and Shikoku on the approach to Kure. The area allotted to BCOF was the south-western part of Honshu and the island of Shikoku. It was markedly inferior to those areas of Japan which were occupied by the American forces in terms of amenities such as leave facilities, clubs and hostels, good accommodation for the troops and access to theatres, shops, etc. Although the units in BRINDIV generally had other consolations like pretty countryside, pleasant little market towns and locations on or near the coast, those in BRITCOM Base in Kure and Hiro were faced with depressing surroundings. The desolation of Kure and Hiroshima and their dreary suburbs meant that the Japanese population in these areas were living at barely subsistence level and in considerable hardship, short of food, proper shelter and many of the simple necessities of life. Roads were generally confined to the narrow coastal plain and the railways were the easiest form of transport between the main centres, though ferries and other craft were also much used.

When 363 Company disembarked at Kure, to the music of the band of one of the Indian battalions which had arrived earlier, they moved into Point Camp, which had been a Japanese submarine base and a gun-testing establishment on the western side of the naval base. Round the Point was located 980 (IWT) Heavy Workshop Company RE, a very useful unit with access to water transport to locations difficult to reach by road. In the hillside behind Point Camp were tunnels protected by blast-proof entrances and used for storage and engineering workshops which (the Company believed) had been manned by British PoWs. The buildings at Point Camp were inadequate for the Company and generally in poor condition. 17 CRE, who was located between Point Camp and Kure town, initially accommodated the officers of 363 Company in his Mess but this arrangement did not appeal to Maj Locke (whose reasons are not recorded, but it was traditional for field companies to have their own messes). He ordered the rapid construction of an Officers' Mess at Point Camp. Improvement of the company's accommodation had a high priority, and its own tradesmen, with local contractors arranged by 17 CRE, improved four barrack blocks and built a new one, a VCOs Mess and the "Star of India" canteen for the IORs, over the next few months. A JCOSA signal in September 1946 stated that "The Star of India Club for the use of Indian troops in the Base was opened by the C-in-C on 25 September 1946."

The "Star of India" canteen, used by all three classes in the company, was a major success for Maj Locke in helping to establish a cohesive unit and maintain morale when there was little else available in the way of amenities for the troops initially, though Point Camp also had a cinema which showed English language



and Indian films. Improvement of amenities was a high priority for the CinC of BCOF, particularly as, unlike the Americans, the Australians had a strict "no fraternisation" policy which was very restrictive and meant that the troops were not allowed social contact with the local population. Eventually clubs were built in Kure for both officers and ORs, and leave hostels for officers and women serving in various organisations became available to BCOF units. These leave centres included the Kawana Hotel on the Izu Peninsula and the BCOF Rest Centre at Lake Chuzengi near Tokyo, which gave access to the Nikko shrines. Local beaches such as Karuga and coastal beauty spots like Myajima, with its huge Torii arch in the water and Iwakuni with its famous wooden bridge, were popular. HQ BCOF published a daily newspaper "British Commonwealth Occupation News" (known as BCON) which included a page of Indian news, much of it in Urdu. This and Forces Radio which operated a station broadcasting daily from 1.00 pm to 10.00 pm kept the Force abreast of events both locally and worldwide. 363 Company were involved in constructing a sound-proof studio in Kure for the Forces Radio organisation.

But most of these welfare improvements came once the Force had settled in. Initially the emphasis was on "get-you-in" works, then improvements, for the Sappers at least, as have been described already. An Engineer report recorded that "considerable difficulty was experienced in the early stages because of the lack of the stores required to rehabilitate barracks. This was due to several factors, the most important being the world-wide shortage of housing materials and the lack of shipping space....the situation has now improved mainly due to the increasing volume of materials arriving from Japanese factories." One problem the shortage of materials affected was the provision of heating in barracks, as winter approached. As supplies of materials improved, from September 1946 the works undertaken then increased in scope. The company lent Lt Dyer to 17 CRE and assisted by an Australian clerk of works he supervised the construction by Japanese contractors of a camp for the Australians near Hiroshima. The arrival of Lts MacSwiney, Coleman and O'Sullivan in 1947 enabled more works to be undertaken and additional Junior Officers' Quarters were built, the main kitchen in Point Camp redesigned and the whole electrical installation in the Kure Officers' Club renewed (and not a moment too soon. Electrical faults were a common cause of fires in the buildings in Kure many of which were largely built of wood). Some idea of the scale of the work undertaken can be gauged from the record of July 1947 when members of the Company HQ platoon alone supervised 6000 hours of maintenance work by tradesmen of one contractor in BRITCOM Base. But HQ BCOF had already realised in August 1946 that the original engineer organisation based on field units was not suitable for carrying out the engineer tasks for BCOF which were essentially of a constructional nature, requiring execution by Japanese contractors supervised by experienced Works Services personnel. 363 Company found that all their construction tasks, whilst very useful and giving the company's tradesmen an all-too-rare opportunity to practise their trades, were far removed from those normally undertaken by a field company and there could have been a danger of the standard of discipline

of the company declining through lack of practice in the basic military skills. The infantry battalions were able to maintain these by patrolling against illegal immigrants from Korea, or against the black market which was flourishing in the atmosphere of shortages, by individual training and by stints of ceremonial guard duty on the Imperial Palace in Tokyo, organised by British Commonwealth Sub-Area, Tokyo (BRICOSAT). The only means the company had of "showing the flag" was by taking its share of these ceremonial duties, and to enable them to do so with *crédit* every Saturday morning's session of close order and arms drill was a regular ritual. As a result, 363 Company was a proud, well-drilled and smartly turned-out unit, their presence and bearing impressive and enhanced by their headdress of *pagri* and red *palla*, worn in the traditional style unique to each of the three classes. They took part in other ceremonial occasions too, such as the parade in celebration of Empire Day on 24 May 1947 at the Anzac Ground in Kure and that held on 15 August 1947 to mark Independence.

The parades in Tokyo in particular illustrated the attitude of the Japanese urban population to the occupying troops. Initially the Japanese were apprehensive and fearful of them, not knowing what to expect, but soon became used to the liberal attitudes of the American troops who formed the whole of the occupying force until the arrival of BCOF. The women were by custom subservient and would smile at the troops when they saw them; the men in the rural areas were generally indifferent to them. Men in the crowds watching the ceremonial parades in Tokyo, however, would turn their backs on our troops as they marched by. This was a deep and calculated insult, and was perhaps indicative that the men concerned did not accept that the Japanese had lost the war. Some resentment by the Japanese was understandable; they were not allowed to travel in train compartments reserved for BCOF personnel when their own were overcrowded, nor were they allowed to overtake BCOF vehicles. The Japanese contractors employed by the Company through 17 CRE were polite and respectful in their attitudes, appearing anxious to please, and obviously realised that BCOF was providing their livelihood. What impressed many of the troops, however, was the strong sense of discipline inherent in the Japanese people, which among other things enabled them to accept the decision of the Emperor to surrender when many of them wanted to fight on, and to survive in the tough conditions existing after the end of the war. These were common to almost any conquered people whose country was occupied, and led to such social problems as the black market, sexual promiscuity among the female population and resultant increase in venereal disease despite BCOF's strict policy of non-fraternisation already mentioned. This problem was particularly apparent among the Australian units where the incidence rose to a figure of 40% and gave serious cause for concern. The Kure area in particular, being a naval port, had always had a large population of prostitutes catering for the sailors in the base, and these had been augmented by girls who had lost their steady American friends (who gave them food) when the US forces handed over to BCOF. The Company Medical Officer, Capt Choksey, recalls that "thanks to the high standard of discipline maintained by the VCOs and officers, VD was not at all a problem in 363 Company, where

the regime of plenty of work, plenty of sport and a good unit morale reduced the temptations." He also mentions that "the British officers in charge of the three platoons were young, recruited almost at the end of the war, and friendly with both the men and the VCOs. The Company had built a *masjid*, a *mandir* and a *gurdwara* and used them regularly, and the officers also used to visit them with their *jawans*, so there was a good spirit and a high moral standard among the men." He remembers that the local water had to be chlorinated against possible bowel infections and he was also professionally interested in the effects of the atomic bomb on the inhabitants of Hiroshima, which he visited with other officers from the company. They were awe-stricken by the scene of utter devastation which they saw. "There were no heaps of rubble (like those in Kure) but the whole city was absolutely flat - almost like a map.because of the very high temperature caused by the bomb." At that time the dangers of radiation from the bomb were not widely known, and one of the officers recalls bringing home with him some fused bottles he had picked up at Hiroshima. He kept them until he realised the potential risk.

The importance attached to sport has been mentioned. The poor road communications made sporting contact with the units of BRINDIV very difficult and 363 Company had to confine its sporting rivalries to the units in BRITCOM Base. They won the inter-unit hockey league and did well in inter-unit football which was very popular in BRITCOM Base. They had several games pitches laid out within Point Camp, including a paved court for handball and were perhaps better-off in this respect than many other units in the area.

A keen interest in their sporting prowess was taken by 17 CRE, Lt Col Cullen RAE who frequently visited the Company with his adjutant Capt Mahalm RAE. One such occasion was the Company Sports Day which Maj Husain organised in August 1947, when Lt Col Cullen presented the prizes. The Company enjoyed a good rapport with both him and Capt Mahalm. Capt Coleman recalls that they "became very close to 363 and were greatly respected." He also recalls that the officers of 363 Company were invited by those of 17 CRE to a formal "Waterloo" dinner in the latter's Mess on 18th June - perhaps a strange occasion for them to celebrate as Waterloo was hardly a Sapper battle and certainly not an Australian one. Mutual respect and affection did not always exist between Australian and Indian troops in some of the other BRITCOM Base units. Peter Bates describes how many of the Australian soldiers could not understand their Indian comrades and were sometimes jealous of them. either over their greater success with the Japanese women or, for example, the fact that sheep were imported from Australia for the Indian troops' rations whereas the Australians had to put up with tinned meat initially. (Whilst the negotiations over the size and composition of the British-Indian contingent were going on before they left India, two VCO's were despatched to Australia to satisfy themselves as to the supply of the Indian troops' meat ration). Bates also describes some unfortunate incidents between Australian and Indian units in Hiro which reflected little credit on either side. None of these involved 363 Company.

On 21 December 1946 a severe earthquake shook Japan and caused considerable damage and casualties, particularly in the Osaka area two hundred miles east of Kure. A report in BCON stated:

"KURE, Sat - soldiers in pyjamas or greatcoats dashed out of their swaying barracks to temperatures below freezing point, when the most severe earth tremors ever recorded here shook the Kure-Hiro area for two minutes. The quake caused considerable damage in the docks area and temporarily disrupted rail services. No BCOF installations were damaged. No serious injuries were reported among troops. In unit barracks, wardrobes and rifle-racks crashed to the floor and china was smashed."

The southern side of Shikoku was more severely affected in the Kochi area, near the bases of two of the British battalions of BRINDIV. The Dorsets and the Camerons were able to assist the local Japanese and this did much to improve the attitude of the locals to the BCOF troops. One of the unfortunate results of the "no fraternisation" policy of the Australian command of BCOF and the refusal of the Americans to allow BCOF any share in the military government of Japan was that the Japanese tended to regard the BCOF troops (whose contact with them was restricted to patrols or other "control" measures) as oppressors who did nothing for them. This was in contrast to the relaxed attitude of the American occupying forces. Thus the assistance given by the British troops to the local population after the earthquake was greatly appreciated by the latter.

For some months before this, the CIGS in London, Field Marshal Lord Montgomery, had been trying to persuade the British Government that the UK could not afford the manpower necessary to maintain the British Army element in BCOF. Tensions in post-war Europe, the Arab-Zionist troubles in Palestine, and the emerging Chinese Communist threat in Malaya, were tying-down British troops in considerable numbers. Furthermore, the British Government was not seeing all the benefits they had hoped to obtain from representation in BCOF, in terms of commercial and cultural influence on the Japanese - perhaps another indirect result of the isolating effects of the "no fraternisation" policy. Eventually they succumbed to the manpower argument and informed the Australians and the Americans that the British brigade would be withdrawn. This happened in February 1947 when 5 Brigade redeployed to Malaya, where it was subsequently re-numbered, its original number going to a brigade in BAOR. This move had no immediate effect on 363 Company, as a unit supporting BRITCOM Base. But inevitably, with the uncertainties of India's political future about to be resolved, pressure began to increase to withdraw the Indian Army contingent also. In the event, this decision was taken shortly before Independence Day, 15 August 1947, which 363 Company celebrated with a commemorative parade in Point Camp, decorated for the occasion with the flags of India and Pakistan. The company held another commemorative parade soon after, when Lt Col Cullen presented every member of the Company with a souvenir tankard.

The Company embarked in HT *Devonshire* at Kure on 30 August 1947, arriving at Madras on 14 September with Maj Husain, Capt Dyer, Lt MacSwiney

and Lt O'Sullivan. The Company then entrained for Kirkee, Lt MacSwiney bringing the Company's vehicles from Madras to Kirkee by road. Some excess stores were loaded in SS *Empire Athelstan* at Kure and reached Calcutta later in September. One can only guess at the nature of these "excess stores".

When the Company arrived at the station they were met as usual by the Commandant, Colonel MRHZ Swinhoe, and the Group band. They were described by a staff officer from Group HQ who was present as "absolutely immaculate in turnout and splendid in their bearing. I had never seen a smarter company." They were a credit to the Royal Bombay Group, and to the Indian Army, of which they had been worthy representatives in Japan. The Company then began to disband and this process was completed by the end of October.

OFFICERS WHO SERVED IN 363 FIELD COMPANY IN BCOF JAPAN

OC	Majs RP Roche, SM Husain RIE (Feb 1947)
2IC	Cpts SM Husain RIE, PT Davenport (Feb 1947), PV Ely, MDF Dyer
HQ	Lt DR Coleman (Mar 1947)
MO	Capt NJ Choksey IAMC
1 PI (PM)	Lts PV Eley, M O'Sullivan (April 1947)
2PI (Mah)	Lt MDF Dyer
3PI (Sikh)	Lts PT Davenport, J MacSwiney (Feb 1947)

No British WOs or SNCOs accompanied the Company to Japan.
No details of the Company's VCOs are available.

ORDER OF BATTLE OF 17 (AUSTRALIAN) CRE (WORKS)

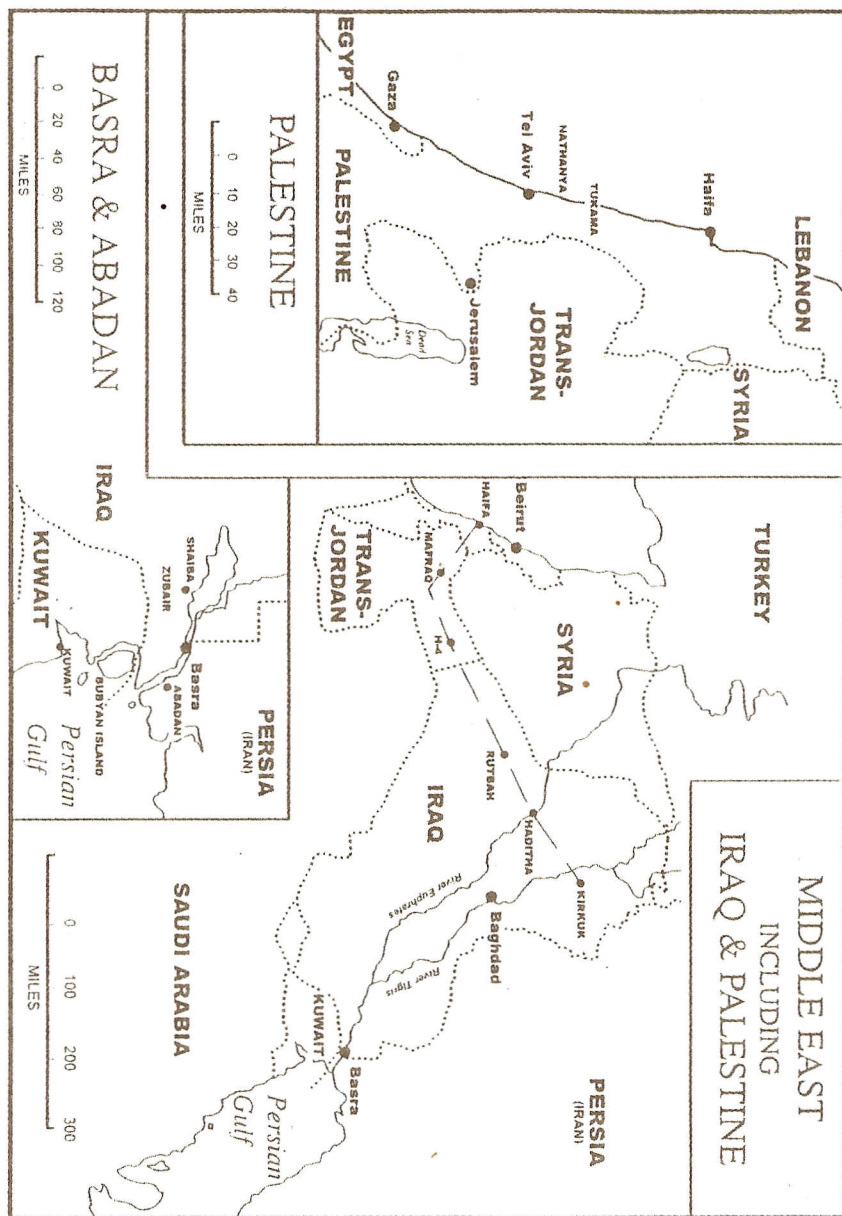
Responsible for Engineer support to units in BRITCOM Base

Located at BRITCOM Base Kure
 HQ 17 Australian CRE (Works)
 33 Australian Army Troops Company RAE
 6 Australian Welding Platoon RAE
 363 (RB) Indian Field Company RIE

Located at BRITCOM Base Hiro
 14 Australian Workshop & Park Company RAE
 10 Australian Bomb Disposal Platoon RAE
 653 Indian Mechanical Equipment Company RIE
 705 Indian Mechanical Equipment Platoon (Type B) RIE
 709 Indian Mechanical Equipment Platoon (Type B) RIE

COMPILER'S NOTES ON SOURCES

363 Company kept a war diary only until they left Rangoon to re-form in India. In addition to anecdotal material provided by Cpts Davenport and Coleman and Capt (later Col) Choksey this account is based on information in the following publications:-
The Indian Engineers 1939-1947 by Lt Col EWC Sandes DSO MC
Japan and the British Commonwealth Occupation Force 1946-52 by Peter Bates
 (published by Brassey's) by kind permission of the author
British Commonwealth Occupation News of 23 December 1946
Know Japan a booklet issued to BCOF personnel in 1946
 Extracts kindly provided by Brig PJ Greville CBE (late Royal Australian Engrs) from
 JCOSA Staff reports and a draft History of BCOF compiled by BCOF late in 1946



CHAPTER TWENTY-SEVEN PALESTINE AND IRAQ

Compiled by Lieutenant Colonel DL Jones

The end of the war in Europe in May 1945 inevitably saw the beginning of the run-down of Persia and Iraq Command (PAIC). Indeed a treaty signed by Britain, Russia and Persia (now Iran) provided for the removal of all allied troops in Persia by 12 March 1946. Nevertheless there was still some activity in Iraq, which did not see the last of British or Indian troops until 1947. The RAF maintained a presence at Habbaniya Airfield near Baghdad until 1958.

49 (RB) Army Troops Company, the last of the original war time RBS&M PAIforce units, did not leave Iraq until June 1946. Their concluding activities there post-VJ Day are recorded in Chapter 7.

IRAQ & PALESTINE 1945 - 1946 482(RB) FIELD COMPANY

On VJ-Day 1945, 49 Army Troops Company might have expected perhaps justifiably to be the last of several RBS&M units to serve in Iraq. Events would have proved them wrong. On 1st October 1945 under the command of Maj JS Sherwin, 482 Company disembarked at Basra from SS *Jelabunya*, having previously served in NW Frontier Province. They went initially into the transit camp at Zubair, to await the arrival at Shaiba of 60 Ind Infantry Brigade. The company was to relieve 57 (QVOM) Field Company which had first arrived in Iraq in 1941 as part of 6 Indian Divisional Engineers.

482 Company spent the next three weeks reorganising its personnel, stores and equipment and repairing their newly issued vehicles - perhaps not surprisingly at this stage in the history of PAIC these were not in good condition. At the end of October, following a change of orders, the company moved to Baghdad en route to join Middle East Command. Crossing the desert in trucks from Baghdad and following the pipeline route via Wadi Modi, Rutbah, H4 and Mafraq, the company eventually reached Camp 21 on 4 November 1945. Camp 21 was quite pleasantly situated between Tukarma and Nathanya, the latter on the coast of Palestine between Tel Aviv and Haifa.

The situation in Palestine at this time was very tense. As the world power with the League of Nations mandate to administer Palestine, Britain was in a difficult position. The Balfour Declaration of 1917 had proposed a Jewish homeland in Palestine; the indigenous Arab population feared that this would

mean they would either be ousted from land they regarded as rightfully theirs or, at best, might become subservient to the incoming Jewish settlers. The British had allowed some Jewish immigration into Palestine before 1939, but on a strictly limited basis of annual quotas. However, with thousands of Jewish displaced persons and refugees seeking homes following the end of the war in Europe, the world-wide Jewish community in 1945 was exerting pressure on Britain to raise the entry quotas for Jewish immigrants or to abolish them altogether and allow unlimited access. As this pressure increased so did Arab fears, until both Arab and Jewish communities felt they had no option but to fight for what each side considered its rights. Britain was blamed by both sides and as the power changed with maintaining order and with finding an equitable solution, was unpopular with both. The British forces in Palestine thus became the targets for attacks of increasing violence by armed organisations from both Arabs and Jews, but particularly the Jewish Stern Gang and Irgun Zwei Lumi.

482 Company had been placed under command of CRE 6 (British) Airborne Div and in support of 6 Airlanding Brigade. Four days after arriving in Camp 21 the company was visited by Maj Gen EL Blois, GOC 6 AB Division, who welcomed the company to his command. The next few months until April 1946 saw the company occupied on camp construction and maintenance with platoons detached to various camps under the Brigade's control. Maj Sherwin departed for UK on repatriation, succeeded as OC by Capt Bhagwara. In common with most units at this time, the company saw many comings and goings amongst the officers, as a result of schemes for repatriation and UK leave such as LIAP and LILOP. A list of officers who served in the company whilst in Palestine is at the end of the chapter.

Much emphasis during this period was placed on education and resettlement training, the latter including visits to Jewish settlements and farms. Some administrative difficulties were experienced in the first few months as neither 6 AB Div nor 21 Area HQ at Sarafand had experience of administering Indian troops. On 8th May 1946 the company learnt, from a broadcast by the CinC India to all the Indian Armed Forces, of the British Government's decision on the future government of India. At about this time Sub Laxman Bhosle left for Kirkee on transfer.

The increasing tension in Palestine began to make itself evident to the company. Spr Jagat Singh was attacked by two men, but fortunately not injured; Spr Vishnu Sawant fired at two men seen near the camp perimeter fence, but missed. The company started paying more attention to weapon training and range classification. Whilst some camp works for units in the Brigade still continued, the company began to become involved in work of a more operational nature, such as minefield and wire defences of police and coastguard posts. Coastal patrols became an important task for the infantry once the Jews started trying to overcome the immigration restrictions by running small ships (usually in a state of advanced decrepitude) ashore at night, crammed with illegal immigrants

who disappeared into Jewish settlements inland. Vehicle checkpoints and search-sweeps took up much of the infantry units' time whenever it was discovered a landing had occurred.

In June 1946 the company was in support of 1 Para Brigade and in the second half of the month the Jews launched a campaign of bomb attacks against British personnel and structures such as bridges. The Allenby Bridge over the River Jordan was demolished on the night 16/17 June and was replaced over the following two days by a Bailey bridge built by 1st AB Squadron RE assisted by 482 Company which prepared the abutments and approaches. The company's working party from No 2 (Mah) Platoon and No 3 (Sikh) Platoon was commanded by Capt HE Everett and included Sgt Hazelwood RE. The CRE 6 AB Div congratulated the company on its work and particularly on its anti-malaria discipline whilst on site.

The series of explosions on bridges at this time sadly affected the company too. On the morning of 17th June HQ 1 Para Brigade informed the company that an unexploded demolition charge had been located under a bridge near the Jettlike Police Post. Lt RC Allen, Hav Bhagwan Singh and six sappers were dispatched to disarm the charge. A few hours later the BM 1 Para Brigade informed OC 482 Company that Lt Allen had been killed in an explosion on the bridge; there were no other casualties.

Lt Allen's funeral was held at Ramle cemetery two days later and was attended by CRE 6 AB Div and a representative of the Chief Secretary, Palestine Government. The same day parts of Haifa and Tel-Aviv were declared out of bounds to troops, who were ordered not to move unarmed or singly. (This state of affairs lasted until the last British Army units left Palestine in 1948.) Six British officers were kidnapped by the Jews in Tel Aviv, this resulting in massive sweeps to round-up suspects, an operation lasting two days. The company was kept busy improving the wire defences to many camps and minor works within their own camp. All ranks were confined to camp except for operational duties and essential administration as the local situation became more critical.

On 11th July three IORs (all PMs, one lance naik and two sappers) were reported missing. It was presumed they had left camp, unarmed, between 0500 and 0600. Searches of nearby Arab settlements proved fruitless but three days later the three deserters (as they turned out to be) were picked up at the frontier post at Ras-al-Nasoura on the border with the Lebanon. They were returned to the unit two days later, for summary courts martial in due course.

Towards the end of July the company was warned to stand by to assist 9 Para Squadron RE to clear the debris of the King David Hotel in Jerusalem. This hotel housed much of the British administration and was the subject of a massive Jewish bomb attack on 24th July in which 91 people were killed and many more injured. The following day the OC 482 Company and Lt Turner met the Chief

Engineer (Brig Freeland), the CRE and OC 9 Para Squadron RE in Jerusalem to reconnoitre the tasks. No1 Platoon moved to Jerusalem the next day and started work that afternoon.

Apart from No 3 Platoon starting work on an airstrip at Asluj the month was notable for Maj Bhagwara's departure for India. He handed over temporary command of the company to Acting Capt Ross-Magenty until the arrival on 22nd August from India of Maj WW Clarkson. From the beginning of September the company formed a "flying squad" which could move at 10 minutes notice to deal with incidents involving Jewish mines or bombs. In one of these at Kfar Vitkin, the detonator of one of six Jewish box mines had exploded causing slight damage to the OC's hand. There were several such incidents in which charges had to be disarmed on the bridges and railways during September. At the end of the month the OC learnt from CRE 6 AB Div that the company HQ and one platoon was to move to the area controlled by 1st Infantry Div to go under the command of the CRE of that division. After a year in which the company had carried out a wide variety of engineer tasks ranging from mundane camp construction and maintenance, to camp defences and more operational tasks such as neutralising demolition charges and mines, in an increasingly hostile and dangerous environment, the company returned to India for disbandment. By March 1947 this had been completed.

It is perhaps ironic that had events in Iran and Iraq in 1946 and 1947 turned out differently, 482 Company could have found itself serving alongside two other RBS&M units as described in the following section. They were part of a force which would have been reinforced if necessary by a British division from Palestine.

IRAQ 1946 - 1947

99 (RB) FIELD COMPANY 217(RB) INDEPENDENT FIELD STORES PLATOON

In the spring of 1946 the British and Indian Governments considered that the overthrow of the Iranian Government by the Tudeh Party was a strong possibility. This would pose a serious threat to the Abadan refinery, which was still under British control and an important source of fuel for both Britain and India. Accordingly the decision was taken to assemble a force, to be designated Force 401, in the Basra area of Iraq to counter this threat. The force was to be commanded by Maj Gen Loftus Tottenham who had commanded 33 Brigade of 7 Ind Div during the Burma campaign. The major part of the force was to be raised in India and based on 19 Infantry Brigade which had recently returned to India after distinguished service in Italy as part of 8 Ind Div ("The Cloverleaves").

The Indian battalions of 19 Brigade were stationed in Clement Town, Dehra Dun, close to the lines occupied by 99 Company. Since its return from the

Andamans and the disbandment of 116 Independent Indian Infantry Brigade, this company had been an unattached unit. As related in Chapter 23, it had been catching up on leave, education and cadre classes with some rafting and bridging training at the SME's bridging camp at Dhanauri near Roorkee.

19 Infantry Brigade had its own affiliated field company 69 (KGVO Bengal) Field Company which had supported it well during the Italian campaign but was temporarily located elsewhere in July 1946. In view of the primary engineer task, that of crossing the Shatt-el-Arab at Abadan, the Force planners considered a second field company essential. One was available, conveniently close, in the form of 99 Company. Instead of returning to Kirkee for disbandment it was added to the Order of Battle of Force 401 and ordered to re-equip and re-organise.

A period of intensive activity followed. The company handed in all its original vehicles and equipment and moved to a temporary camp with the most primitive facilities at Pashan near Ganeshkind, close to Government House just outside Poona. Here the company drew a complete and brand-new set of vehicles and unit equipment, all indents being accorded the highest priority by Ordnance. Many of the longer-service jawans with discharge dates approaching were replaced by others, including many who had recently completed their training in Boys and Training Battalions. Despite the discomforts caused by the monsoon and the resultant muddy conditions, the company completed its re-equipment and reorganisation in time to sail from Bombay in mid-August on SS *Varela*.

They arrived at Margil, Basra two weeks later after a brief stop at Karachi and a fairly uncomfortable voyage in rough seas with high temperatures and high humidity. On disembarkation, they moved to Shaiba, occupying a very pleasant little camp, complete with masjid, mandir and gurdwara, which had been last occupied almost certainly by 49 Army Troops Company, the last of many RBS&M companies to serve in Iraq, before they returned to India in July 1946. They were in Kirkee at the same time as 99 Company were in Ganeshkind; neither unit knew of their mutual interest in Iraq. At this stage PAIC no longer existed, having no troops in Iran and those in Iraq under the command of British Troops Iraq (BTI). Apart from three Indian infantry battalions in garrison, most units were technical (running cold stores, power stations, water treatment plants and the like, these tasks being performed by two E & M companies RE) or administrative. Many of the former camps in the Shaiba and Margil areas had been sold off and amenities such as the Shaiba Officers' Club were running down prior to closing.

Unfortunately the Shaiba camp was too far from the Shatt-el-Arab, where the company's prime occupation was to be rafting training. After a short time the company moved to a much less attractive camp in Margil. The rest of Force 401 Engineers, under the command of Lt Col DW Price CBE, had arrived meanwhile and were also located in Margil. 69 (KGVO Bengal) Field Company and 217 Independent Field Stores Platoon (under the command of Lt JN Thomson) were

located under canvas on Coal Island, in the middle of the Shatt-el-Arab and opposite Basra airport. Located with these two units was all the rafting and bridging equipment. HQRE (manned by KGVO Bengal S&M personnel) and 43 (previously in Italy numbered 47) Field Park Company, also a Bengal unit, were located in Margil itself.

The officers, VCOs and senior NCOs in 99 Company at this stage are listed at the end of the chapter. The other units in 19 Brigade and the three battalions in the Basra Garrison are similarly listed.

The role of the two field companies was to raft 19 Brigade and its supporting troops across the Shatt-el-Arab. 69 Company was to be the assault or light bridging company using FBE (Folding Boat Equipment) and 99 Company was to be the heavy rafting company. Until the necessary Bailey pontoon bridging arrived by sea from the Canal Zone in Egypt, 99 Company trained on three ancient Batwing rafts (Class 12) which equipment was long since obsolete in 1946, but was the heaviest load-classification raft then available in Basra. During a tour of Middle East stations the CinC General Sir Miles Dempsey visited Force 401 and saw this equipment demonstrated in a joint training exercise with 6 Field Regiment RIA. Another particularly welcome visitor early in 1947 was Field Marshal Sir Claude Auchinleck, CinC, India. His understanding of the Indian soldier and his great affection for him were well-known. It was heart-warming to see how well the troops realised and appreciated this when he spoke to them. Sub Nawab Khan particularly enjoyed his conversation with the CinC.

Once the Bailey pontoon bridging equipment had arrived, 99 Company spent most of its time building and operating shore landing rafts, with loads from Force units, both from Coal Island and from virgin sites on the banks of the Shatt-el-Arab. The time spent at SME Dhanauri and on training with the ancient Batwings proved invaluable; slick drills were developed and excellent experience in raft control with loads on board was obtained. The company also built a CI 24 150ft DD "dry" Bailey bridge upstream from Basra for a Brigade exercise. On another exercise, downstream from Basra, the rafts were built at Coal Island, loaded with the components for the landing bay to reduce the road transport requirements and formed into a train which was towed to the rafting site by a river paddle-steamer operated by an Indian IWT company RIE. To permit the passage of the tow, the "Hull" sinking bridge constructed by Indian Sapper units, including 49 (RB) Army Troops Company, in 1943, had to be lowered to the bed of the river. Once clear of Margil docks area, the paddle-steamer moved so fast that water came over the bows of the pontoons, causing some of them to sink despite the valiant efforts of the company's crews manning the pumps. It took the Basra Port Authority's large self-propelled Goliath floating crane, hired at great expense, to salvage this equipment which was virtually irreplaceable. The IWT Captain was distinctly unpopular at all levels.

Other aspects of the company's possible role were not overlooked. Mine clearance training was carried out and a water-supply reconnaissance in the desert close to the Kuwait border established the potential for supporting a Brigade exercise. Six to eight well-sites were examined; each consisted of up to twelve shallow wells about 2ft in diameter, usually (but not always) surrounded by a 2ft high mud wall and located sometimes in a shallow depression which might flood after rain. Any well without a surrounding wall would then only be found by someone treading on it. In January in Iraq this could be a chilling experience.

The threat of a coup d'état in Iran faded and in June 1947 Force 401 Engineers were ordered back to India. By this time Maj Dhondy had already left 99 Company for a Staff College course and the company was commanded by Maj EC Newlyn, with Capt OE Naddermier succeeding him as 2IC. Maj Newlyn was in the UK on leave, however, when the company moved to India, and Capt Naddermier assumed command for what was to be the last phase of the company's existence as a three-class company. When it arrived in Kirkee it was re-organised (See Chapter I). 217 Independent Field Stores Platoon also returned to India, first to Deolali and thence to Kirkee to disband.

After remaining in Basra initially, Lt DL Jones appeared before a Regular Commission Board in Fayid (Egypt) before rejoining 99 Company in Kirkee. Lt RD Malden also appeared successfully before a Regular Commissions Board in Fayid, but did not rejoin 99 Company. Instead he was posted to 1st Infantry Divisional Engineers in Palestine, where he was awarded the MBE for gallant conduct in the Arab-Jewish conflict.

Officers who served in 482 Field Company in Palestine

OCs	Majs JS Sherwin, Bhagwara IE, WW Clarkson
2ICs	Cpts Bhagwara IE, HE Everett, Ross-Magenty
Subalterns	Lts RCallen*, James, Lowe, Robinson, Turner
Subedar	Laxman Bhosle
BNCO	Sgt Hazelwood
* Killed whilst dealing with a Jewish demolition charge.	

Officers, VCO's and Senior NCO's of 99 Field Company in Iraq

OCs	Majs JK Dhondy RIE, EC Newlyn, Capt OE Naddermier
2ICs	Cpts EC Newlyn, OE Naddermier
Subalterns	HQ Lt RD Malden
	1 (PM) PI Lt Ajit Singh Mangat RIE
	2 (Mah) PI Lt OE Naddermier
	3 (Sikh) PI Lt DL Jones
Subedar	Nawab Khan
Jemadars	HQ Sant Singh 1 PI Mohd Afsal
	2 PI Hari Kadam 3 PI Buta Singh
BWO(Stores)	WO2 T Wright
MT Sergeant	Sgt T Evans
Coy Hav Maj	Ghulam Mohd; Coy QM Hav Dhondy Shinde
Hav Chief Clerk	Rattan Singh

Palestine & Iraq

Principal units in Force 401 and Basra Garrison

Reconnaissance	Indian Long Range Squadron IAC
Artillery	6 Indian Field Regiment RIA
Engineers	HQ Force 401 Engineers 69 Indian Field Company RIE 99(RB) Indian Field Company RIE 43 Indian Field Park Company RIE 217(RB) Independent Indian Field Stores Platoon RIE
Infantry	1/2 Punjab Regiment 3/8 Punjab Regiment 6/13 Frontier Force Rifles

Force 401 also contained the normal complement of supporting service units.

Basra Garrison Battalions

7/11 Sikh Regiment
2/22 Sikh Light Infantry
2/23 Mahar Regiment

COMPILER'S NOTE ON SOURCES

The account of 482 Company's service in Iraq and in Palestine is based entirely on their war diaries from October 1945 to September 1946. No anecdotal material could be found to describe events during this period.

The description of 99 Company and 217 Platoon in Force 401 is based entirely on the personal recollections of Lt Col DL Jones and Prof OE Naddermier who were both in the Company throughout this period. Captain Naddermier was in temporary command when the Company left Iraq for Kirkee.

Details of the Order of Battle of Force 401 were verified from the Indian Army Orders of Battle in the India Office Collections of the British Library. The help and friendly co-operation of the Deputy Director, Mr AJ Farrington, is gratefully acknowledged.

ESSENTIAL SUPPORT MEDICAL, TECHNICAL AND FOLLOWERS

Medical

There was a doctor on the field company establishment. Early on many were of Viceroy's Commissioned status, recruited from Government civil sub-assistant surgeons. They were well trained and could cope with all usual problems. Later Indian Commissioned medical officers appeared. Altogether units were well served.

Technical - British Warrant Officers and Sergeants

Each field company had a warrant officer class II and a sergeant, one for MT and one for resources. Field park companies had a third for workshops. They messed with the officers and turned their hands to many things outside the strict fields mentioned; for example the maintenance and repair of minor mechanical equipment, outboard motors (very temperamental), pumps etc.

They were volunteers, trained under careful probation at Kirkee and were required to become competent in Urdu. Several were commissioned; for example JK Wren took part in the earthquake relief at Quetta in the late '30s, was in North Africa with 4 Ind Div, became WOI in charge of the Kirkee workshops, served with 328 Field Park Company in Arakan until 6 April, before bringing the company back to Madras, when he was hospitalised previous to leaving for the UK.

Theirs was a curious status. They were not subordinate to VCOs and neither they nor the VCOs owed each other salutes. Almost without exception, due to careful selection and training at Kirkee, relations were excellent. On meeting, the subedar and sergeant-major would usually salute each other simultaneously.

They often led reconnaissance parties and were sometimes, when companies were often short of officers, put in charge of detachments operating with other arms. For example in Eritrea in March 1941, where Sgt Knights was the sapper detachment commander in Fletcher Force, a composite all arms vanguard group in the advance from Keren to Asmara, he was directly responsible to the force commander (see Chapter 4).

WO II James Butler was born and brought up in India with a father who was in the Indian Army for 33 years. Being bi-lingual he had a remarkable understanding with the Indian soldier from the VCOs downwards, eating with

them in their langars and discussing their lives in the Himalayan homes of the 95 Mandi (Independent) Field Company to which he had been posted in 1942. He had joined the Army Apprentices College (then known as the Army Technical School) in 1937, went on to an RE Training Battalion in 1941 and from there volunteered to serve with the Indian Engineers, mainly because of his knowledge of Urdu. Mr Butler also said "I also got on extremely well with all the officers and the unit lived as any family would, on a very friendly but committed basis, as we only had each other to talk to for years on end in some very isolated and uncomfortable surroundings. Perhaps unusually, the officers, the OC apart, and I were on Christian name terms and I have many happy memories of our years of service together and will always cherish them".

Followers

Very little has been written about one special category - the enrolled non-combatants. These were mess cooks and servants, sweepers and bhistis and many specialists, such as darzis, mochis, barbers and dhobis, who had all volunteered to share the fortunes of the Bombay Sappers to carry out those duties which were shunned by the normal castes. They were paid by the Army, fed and provided with basic items of clothing and in return they followed wherever their unit went, cheerfully and loyally. Their influence on comfort and well-being was out of all proportion to the smallness of their numbers on the establishment. Their devotion and valour has been immortalised in Kipling's *Gunga Din*.

It was difficult to recommend them for official awards for any particular outstanding action as their service value was primarily loyalty and reliability. However 21 Field Company were able to give tangible public recognition to Sweeper Parsadi Ram, who the OC nominated to be a member of a specially selected small multi-class party of 24 VCOs, IORs and followers of the 4th Indian Division to show off the Indian Army to war-torn Britain. The visit, which was a great success, took place in August 1943 on completion of the victorious African campaigns, for which the division had been a major contributor. (See Chapter 10)

Capt Bennett also mentions the devotion to duty of 363 (RB) Field Company's mess cook Nadesen who, during the defence of Imphal, carried on cooking above ground, while the rest of the company when shelled took to cover. (See Chapter 18)

There can be no pleasure in the knowledge that no less than 42 of them lost their lives in service with the RBS&M. Of these 20 died in captivity, mostly in the custody of the Japanese in the brutal and disease-ridden camps of the Burma-Siam railway. There were others equally unfortunate, such as mess-cook Suleman in 481 Field Company (who was called Solomon), who died after torture by his captors when 'Bastion' was over-run on the night of 11th June 1944.

The names of those who lost their lives are very properly included in the Roll of Honour and will not be forgotten. Of the many hundreds of others there is, sadly, no official record, but there are many memories of occasions, if not names, when their support did so much to make camp life tolerable and to sustain morale. In happier circumstances David Young recalls:

"In 1943 Simon de Cruz joined 30 Field Company as cook for the officers. He was a Christian from south India. Before joining us he had worked in a Planters Club in Ceylon. His ingenuity in preparing meals for us from the rations supplied, often by air-drop, and to cook them under all weather conditions of heat or monsoon, making fires where no materials seemed to exist, was quite unbelievable. Undoubtedly the fact that we kept fit and with energy was due in large measure to his service.

"Twenty years later I was in Kerala in South India visiting schools. Arriving at the Headmaster's office in one of them, I asked the peon to take my card in, and I was shown in. When I came out the peon said 'it is Maj David Young of Tis Campani, isn't it?' Yes it was Simon de Cruz who recognised me after all those years. He looked just the same, but had given up being a cook and got this comfortable job and felt very satisfied. It was a joy to talk to him again, about his family and all that had happened to him."



HONOURS & AWARDS

Battle Honours

1940-1943	North Africa
1940-1941	Abyssinia
1941	Syria
1941-1942	Kuantan
1941-1942	Malaya
1941-1942	Defence of Sinzweya
1941-1942	Defence of Meiktila
1942-1945	Myinmu Bridge Head
1942-1945	Burma
1943-1945	Italy
1944-1945	Greece

Decorations & Awards

VC	Lt PS Bhagat	1941	21 Fd Coy
DSO	Lt Col HP Cavendish	1941	HQ RE 4 Ind Div
	Lt Col JH Blundell	1942	HQ RE 4 Ind Div
OBE	Lt Col HP Cavendish	1941	HQ RE 4 Ind Div
	Lt Col FD Peacock	1943	671 ME Engrs
	Lt Col JR Connor	1945	15 CTE
	Lt Col PG Hatch	1945	HQ RE 7 Ind Div
	Lt Col ARS Lucas	1945	HQ RE 20 Div
	Lt Col PA Easton	1945	HQ RE 36 Div
	Lt Col RC Orgill	1945	HQ RE 5 Div
	Lt Col B Utting	1945	457 FAE
	Lt Col RAG Binney MA	1945	HQ RE 20 Ind Div
MBE	Sub Chet Singh	1939/40	18 Fd Coy
	Maj NL Stuart	1941	18 Fd Coy
	A/Nk Shankar Bhosle	1939	22 Fd Coy
	Maj JRG Finch	1943	91 Fd Coy
	Maj WG Carter	1943/44	403 Fd Pk Coy
	Sub Jagir Singh	1943/44	483 Fd Coy
	Maj EM Hall	1944	483 Fd Coy
	Maj RI Swain	1944	30 Fd Coy
	Capt CH Vellacott	1944	469 Tps Engrs
	Maj J Priestman		457 Army Tps Engrs
	Maj J Lindsay		Tehri Garwhal Fd Coy
	Sub Ramzan Khan	1945	92 Fd Coy
	Maj CV Peake		
	Maj FA Southam	1946	India
	Maj AN Fradgley	1945	30 Fd Coy
	Maj JR Hudson		
MC & Bar	2Lt RWStG Tyler	1942	18 Fd Coy
	Lt K Ryden	1944	401 Fd Sqn
	Maj JH Clark	1945	92 Fd Coy

MC	Lt CC Fraser	1942	18 Fd Coy
	2Lt RWStG Tyler	1942	18 Fd Coy
	Maj JHS Bowring	1942	20 Fd Coy
	Lt JK Beartfoss	1942	21 Fd Coy
	Lt LD Hughes	1944	21 Fd Coy
	Jem Amrut Khanvilkar	1945	21 Fd Coy
	Jem Mohd Riaz	1945	21 Fd Coy
	Lt MM Pillai	1942	45 Army Tps Coy
	Lt TD Oxley	1942/3	26 Fd Coy
	Jem Nand Singh	1943	30 Fd Coy
	Capt DS Wilson	1943/4	24 Fd Coy
	Capt DS Young	1943/4	30 Fd Coy
	Lt JK Yearsley	1944	20 Fd Coy
	Sub Bachan Singh	1944	481 Fd Coy
	Lt K Ryden	1944	401 Fd Sqn
	Lt WS Adams	1944	401 Fd Sqn
	Lt EO Briggs	1944	401 Fd Sqn
	Maj RB Johnson	1944/5	93 Fd Coy
	Lt JF Cull	1944/5	37 Fd Sqn
	Lt E Briggs	1944	401 Fd Sqn
	Lt CP McNaughton	1944	30 Fd Coy
	Maj JH Clark	1945	92 Fd Coy
	Maj MI Prichard	1945	481 Fd Coy
	Maj CF McDougall	1945	402 Fd Coy
	Lt WW Guthrie	1945	93 Fd Coy
	Jem Jahan Dad	1945	29 Fd Coy
	Sub Ramzan Khan MBE	1945	92 Fd Coy
IOM	Sub Rehmat Khan	1941	18 Fd Coy
IDS	LNK Balkrishna Yerundkar	1939/40	21 Fd Coy
	LNK Ghaarib Singh	1941	18 Fd Coy
	Hav Sai Akbaar	1941	20 Fd Coy
	Nk Nur-ul-Haq	1942	18 Fd Coy
	Jem Ananda Jagtap	1942	21 Fd Coy
	Hav Basappa Salunke	1942	18 Fd Coy
	Spr Shankar Bhore	1942	21 Fd Coy
	Jem Bacharam Jadhao	1942	20 Fd Coy
	Sub Sakhawat Hussain Shah	1943	20 Fd Coy
	Hav Fazal Shah	1943	20 Fd Coy
	Nk Mohinder Singh	1943	11 Br Sec
	A/Hav Santa Singh	1943/44	20 Fd Coy
	Hav Said Mohd Khan	1942	Malerkotla Fd Coy
MM & Bar	Nk Dalip Singh	1944	91 Fd Coy
MM	A/Nk Khem Singh		21 Fd Coy
	Nk Dalip Singh	1944	91 Fd Coy
	Hav Pandurang Sonawne	1944	91 Fd Coy
	Hav Ghulam Din	1944	92 Fd Coy
	L/Hav Sadhu Singh	1944	92 Fd Coy
	Spr Jaisingh Ghag	1944	402 Fd Coy
	Spr Fauja Singh	1944	91 Fd Coy
	Nk Mohd Din		401 Fd Sqn
	Spr Kartar Singh		481 Fd Coy
	Spr Sarwan Singh		481 Fd Coy

	Spr Babu Singh	20 Fd Coy
	Nk Narajan Singh	29 Fd Coy
BEM	Hav Ghulam Nabi	24 Fd Coy
	LNk Nur Hussain	24 Fd Coy
	Spr Ajmer Singh	98 Fd Coy
MENTION IN DESPATCHES		
	Sub Ramchander Kadam	PoW 1941/42 22 Fd Coy
	Jem Mohd Malik	PoW 1941/42 42 Fd Pk Coy
	Jem Mohd Sharif	PoW 1941/42 22 Fd Coy
	Hav Ananda Yadoe	PoW 1941/42 22 Fd Coy
	Nk Naranjan Singh	PoW 1941/42 22 Fd Coy
	Nk Tukaram Singh	PoW 1941/42 22 Fd Coy
	Spr Puran Singh	PoW 1941/42 19 Fd Coy
	Maj J McC Smith	1941/42 24 Fd Coy
	Maj GVC Darley	1941/42 24 Fd Coy
	Maj RC Orgill	1941/42 Malerkotla Fd Coy
	Capt GC Rotter	1941/42
	Maj MEF Bell	1942/43 28 Fd Coy
	Maj HM Millar	1942/43 28 Fd Coy
	Maj L Thorpe	1942/43 26 Fd Coy
	Lt FE Blake	1942/43 26 Fd Coy
	Lt JM McGavin	1942/43 26 Fd Coy
	Sub Walayat Hussain Shah	1942/43 26 Fd Coy
	Sub Amar Singh	1942/43 91 Fd Coy
	Jem Kehar Singh	1942/43 91 Fd Coy
	Jem Kartar Singh	1942/43 28 Fd Coy
	Maj W Westernman	1943 363 Fd Coy
	Maj JH Clark **	1943 363 & 92 Fd Coys
	Jem Bhagwan Singh *	1943 98 Fd Coy
	Hav Mehrban Khan	1943 328 Fd Pk Coy
	Nk Wasawa Singh	1943 24 Fd Coy
	Nk Mahadu Yadaw	1943 328 Fd Pk Coy
	A/Nk Rehmat Ali	1943 28 Fd Coy
	Spr Khushi Mohd	1943 28 Fd Coy
	Lt Col RA Bishop	1943/44 24 Eng Bn
	Sub Maj Shah Jahan Khan	1943/44 24 Eng Bn
	Jem Diwan Singh	1943/44 24 Eng Bn
	Jem Fazal Haq	1943/44 24 Eng Bn
	Jem Naranjan Singh*	1943/44 24 Eng Bn
	Hav Anna Adsule	1943/44 24 Eng Bn
	Nk Shahu Baber	1943/44 24 Eng Bn
	Spr Sakham Sawant	1943/44 24 Eng Bn
	Maj IG MacLaurin	1943/44 402 Fd Coy
	Lt T MacDonald	1943/44 402 Fd Coy
	Maj EM Hall	1943/44 483 Fd Coy
	Maj MI Prichard*	1943/44 481 Fd Coy
	Lt EH Beare	1943/44 28 Fd Coy
	Lt SH Clark	1943/44 483 Fd Coy
	Lt AP Cumming	1943/44 92 Fd Coy
	Lt I McEwen	1943/44 98 Fd Coy
	Lt JKN Yearsley MC	1943/44 20 Fd Coy
	WO11 S Palmer	1943/44 483 Fd Coy
	Sub Aba Sable	1943/44 481 Fd Coy
	Sub Bostan Khan	1943/44 91 Fd Coy

Jem Bhagwan Sakpal*	1943/44	92 Fd Coy
Sub Shah Zaman	1943/44	401 Fd Sqn
Sub Bhagwantrao More**	1943/44	401 Fd Sqn
Jem Nihal Singh	1943/44	481 Fd Coy
Jem Mohd Khan	1943/44	91 Fd Coy
Hav Mohd Sadiq	1943/44	483 Fd Coy
Hav Narayan Kharade	1943/44	20 Fd Coy
Hav Sarwan Singh	1943/44	20 Fd Coy
Hav Vithal Lohar	1943/44	93 Fd Coy
Hav Santokh Singh	1943/44	30 Fd Coy
LNk Milkha Singh	1943/44	481 Fd Coy
LNk Shaikat Ali	1943/44	92 Fd Coy
Spr Abdul Khaliq	1943/44	28 Fd Coy
Spr Kartar Singh (890)	1943/44	481 Fd Coy
Spr Kartar Singh (816)	1943/44	481 Fd Coy
Jem Sajjanrao Shinde	1943/44	483 Fd Coy
Nk Mohd Din	1943/44	401 Fd Sqn
LNk Bapu Patil	1943/44	401 Fd Sqn
Spr Narayan Thakar	1943/44	401 Fd Sqn
Spr Wahid Bax	1943/44	401 Fd Sqn
Spr Vithal Sinda	1943/44	24 Eng Bn
Spr Jumma Khan	1943/44	24 Eng Bn
Lt WJA Bradbury	1943/44	483 Fd Coy
Sub Bostan Khan	1944/45	24 Eng Bn
Jem Atmaram Tate	1944/45	24 Eng Bn
Hav Said Akbar	1944/45	457 FAE
Lt Col B Utting		HQ 457 FAE
Capt WF Faulds		402 Fd Coy
Capt CJ Cooper		HQ 457 FAE
Lt FW Heald		29 Fd Coy
Lt WJ King		29 Fd Coy
Hav Gurdip Singh	1944/45	
Col FS Williams DSO OBE *		33 Corps Tps Engrs
Lt Col RAG Binney		HQRE 20 Div
Lt Col JB Brown*		
Lt Col PG Hatch OBE *	1945	20 Fd Coy & CRE 7Div
Lt Col ARS Lucas OBE*		HQRE 20 Div
Lt Col RS Hawkins		403 Fd Pk Coy
Maj GS Homewood		98 Fd Coy
Capt CJ Bewlay		28 Fd Coy
Capt RJ Connolly		
Capt GN Row		
Lt DA Hartley		
Lt KJ Rowland		
Lt DH Stanley		328 Fd Pk Coy
Lt JR Stagg		481 Fd Coy
Sub Hari Powar		24 Eng Bn
Jem hulam Sarwar		24 Eng Bn
Sub Chuhar Singh		363 Fd Coy
Jem Gurmukh Singh		93 Fd Coy
Jem Shivram Baborao Nangre		29 Fd Coy
Hav Dalip Singh	PoW	22 Fd Coy
Hav Raghu Powar		483 Fd Coy
Hav Sakham Khandagle		402 Fd Coy
A/Hav Kondiram Sakpal		403 Fd Pk Coy
LHav Pritam Singh		324 Fd Pk Coy

Nk Abdul Ghafoor		403 Fd Pk Coy
Nk Rostam Khan		483 Fd Coy
Nk Shamas Din		20 Fd Coy
Nk Arjun Singh		92 Fd Coy
Nk Bhagwant Nagar		20 Fd Coy
Nk Kehar Singh		92 Fd Coy
Nk Muzaffar Hussain		401 Fd Sqn
LNk Karam Singh		92 Fd Coy
LNk Maruti Ghorpade		481 Fd Coy
LNk Nek Alam		402 Fd Coy
LNk Nizam Din		92 Fd Coy
Spr Mohd Alam		483 Fd Coy
Spr Shanker Rane		92 Fd Coy
Hav Nazir Hussain	1944/45	305 Fd Pk Coy
Jem Mahadeo Nilkand		91 Fd Coy
Jem Udham Singh		91 Fd Coy
Hav Dattu Laynappa Mahasager		328 Fd Pk Coy
Spr Arjan Jadhav		98 Fd Coy
WO11 CW Stone		
Maj JS Beddows*		91 Fd Coy
Maj AK Dowse		29 Fd Coy
Maj EC Fisher		20 Fd Coy
Maj JB Irving		92 Fd Coy
Maj JA Keay		
Maj JH Neill		481 Fd Coy
Maj JH Preston		
Maj HE Buckley		93 Fd Coy
Maj HR Jackson		
Maj OWA Kite*	1945	HQRE 36 Div
Maj TL Satchwell		363 Fd Coy
Maj SH Pickett		
Maj BD Richards		
Lt RW Balston		92 Fd Coy
Lt DJF Downie		30 Fd Coy
Capt BKS B Hartshorne		HQRE 20 Div
Capt JR Hudson		Malerkotla Fd Coy
Sub Maj Baburao Powar		
Sub Ghulam Rasul		30 Fd Coy
Sub Jaget Singh		
Sub Teja Singh		
Jem Abuzar Khan		
Jem Budh Singh		92 Fd Coy
Jem Dalip Singh		
Nk Mohd Jan		29 Fd Coy
Lt Col EV Cole	1945	491 PLO Engrs
Maj PG Burrell	1945	401 Fd Sqn
Maj MJJ Rolt	1945	411 Para Sqn
Capt PM Pilditch	1945	9 Br Pl
Lt AP Cumming	1945	92 Fd Coy
Lt J Kerr	1945	484 Fd Coy
Lt RL Pryce	1945	93 Fd Coy
Lt K Ryden	1945	401 Fd Sqn
Sub Ramzan Khan	1945	92 Fd Coy
Jem Sardar Khan	1945	483 Fd Coy
Jem Shaikh Usman	1945	305 Fd Pk Coy
Hav Govind Paowar	1945	481 Fd Coy

Hav Kafait Ali	1945	20 Fd Coy
Nk Gurdial Singh	1945	28 Fd Coy
Nk Kartar Singh	1945	20 Fd Coy
Nk Sohan Singh	1945	328 Fd Pk Coy
LNk Bapu Jagdale	1945	481 Fd Coy
LNk Govind Dalvi	1945	93 Fd Coy
LNk Karnail Singh	1945	91 Fd Coy
LNk Mohd Buta	1945	20 Fd Coy
Maj T Crook	1945	491 PLO Engrs
Maj RHB Johnson	1945	93 Fd Coy
Capt FWW Wyatt	1945	483 Fd Coy
Lt RM Dyer	1945	30 Fd Coy
Jem Shankar Kadam	1945	30 Fd Coy
A/CHM Axal Jang	1945	20 Fd Coy
Hav Amir Ahmed	1945	305 Fd Pk Coy
LHav Chandru Panaskar	1945	20 Fd Coy
Nk Ramchandra Shinde	1945	401 Fd Sqn
A/Nk Hanumant Chowan	1945	401 Fd Sqn
A/Nk Iqbal Singh	1945	30 Fd Coy
H/Clerk Mohd Akbar	1939/40	HQRE 4 Div
Maj GEH Philbrick	1939/40	21 Fd Coy
2Lt PS Bhagat VC	1939/40	21 Fd Coy
Lt Col HP Cavendish OBE *	1941	HQRE 4 Div
Maj RWW How	1941	21 Fd Coy
Maj NL Stuart	1941	18 Fd Coy
Capt BAA Plummer	1941	18 Fd Coy
Lt PCM Mills	1941	20 Fd Coy
2Lt EG Cox	1941	18 Fd Coy
Sub Daulatrao Chaugle	1941	20 Fd Coy
Sub Rehmat Khan IOM	1941	18 Fd Coy
Jem Ananda Jagtap	1941	21 Fd Coy
Jem Lachman Singh	1941	20 Fd Coy
Jem Maruti Ghorpade	1941	18 Fd Coy
Jem Sakhawat Hussain Shah*	1941	20 Fd Coy
LHav Peer Shah	1941	20 Fd Coy
LNk Swaran Singh	1941	18 Fd Coy
Spr Pritam Singh	1941	18 Fd Coy
Sub Mohd Malik	1941	21 Fd Coy
Spr Rakha Singh	1941	18 Fd Coy
RQMS FH Pellatt*	1941	20 Fd Coy
Jem Mangal Singh*	1941 & 42	21 Fd Coy
Hav Balkrishna Jagtap	1941	21 Fd Coy
Hav Ramchander Nimbalkar	1942	20 Fd Coy
A/Hav Dalip Singh	1942	21 Fd Coy
Spr Himan Khan	1942	21 Fd Coy
Spr Shah Alam Khan	1942	21 Fd Coy
A/Hav Tayappa Jadhao	1942	21 Fd Coy
Nk Sheikh Suleman	1943	301 Fd Pk Coy
Maj J Thornber	1943	301 Fd Pk Coy
Maj RH Eagan	1945	21 Fd Coy
Jem Amrut Khanvilkar (died of wounds)	1945	
	1945	21 Fd Coy
LNk Tukaram Jadhao	1945	21 Fd Coy
Lt Col EE Stenhouse	1945	HQ 4 Div Engrs
Hav Ghulam Mustafa	1945	HQ 4 Div Engrs
Nk Ghulam Mohd	1945	21 Fd Coy
Nk Laxman Sakpal	1945	21 Fd Coy

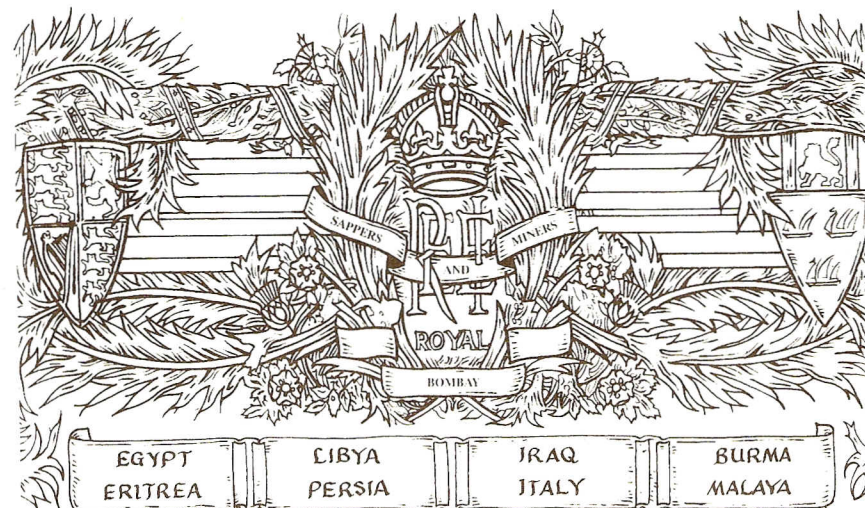
Nk Mohd Sharif	1945	21 Fd Coy
Jem Dalip Singh	1945	21 Fd Coy
Nk Tara Singh	1945	21 Fd Coy
Jem Dalip Singh		
Jem Farzand H Shah		
Jem Jogindar Singh		
Jem Mehar Khan		
Jem Prem Singh		
Jem Sakaram Chowan		
CHM Ghulam Rasul		
Hav Abdul Ghani		
Hav/C Babu Shilke		
Hav/C Ghulam Jaffar		
Hav Gopal Singh		
Hav Lal Hussain		
Hav Mewa Singh		
Hav Piara Singh		
Hav Punaji Chowan		
Hav Sarwan Singh		
LHav Daljit Singh		
LHav Kartar Singh		
Nk Dhondu Mahadik		
Nk Ghaus Bax		
Nk Mohd Akram		
Nk Suleman		
Nk Yeshwant Biwa Gaus		
LNk Hariha Mahadiq		
Spr Mohd Sarwar		
Spr Nazar Singh		
Spr Vasantrao Mane		
Spr Vishnu Bhosle		
Maj JD Hay		29 Fd Coy
Maj RG Hutchins		
Maj HA Mavor		
Capt RRBWP Chambers		
Capt AWK Condon		
Capt LJM McSweeney		
Lt ERH Selley		
LNk Shankar Bhosle		

Croix de Guerre

Capt RD Penney	18 Fd Coy
Sub Rehmat Khan OBI IOM	18 Fd Coy

Note: A possible reason for the number of names on the above list which have no attributed date or unit, is that these were from the last list published in 1946. When hostilities ceased, all outstanding and unapproved recommendations were circulated for re-appraisal with the result that a huge number of names appeared in the King's Birthday Honours of June 1946. The list was so large that the usual back-up files of information seem to have become separated from the London Gazette and, by this time, some units and individuals could not be identified. In 1976, in accordance with the 30 year rule, the London Gazette became a public document in PRO Kew, but no researcher has ever been able to find any of the supplementary information which would normally be expected.

Asterisks after an entry indicate a bar or bars to the award.



Their name
liveth for
evermore

Unka Nam Ubad
Tak Mashhur
Rahega

ROLL OF HONOUR

17 Field Company Malaya 8.12.41 to 15.2.42 then P.O.W

Tehal Singh	Spr	14.12.41	Abdul Rehman	Bhy	30.5.45
Payannan	Spr	23.12.41	Mardan Ali	Cook	5.6.45
Gulab Khan	LNK	3.1.42	Suraina	Sweeper	30.6.45
Piwan Singh	Spr	8.2.42	Mallan	Sweeper	30.6.45
Shivram Shinde	Spr	15.2.42	Mohd Iqbal	Spr	30.6.45
Krishna Bandge	Spr	15.2.42	Lal Singh	Spr	21.5.45
Mohd Hussain	Spr	12.5.42	Karam Singh	Spr	18.6.45
Haji Ahmed	LNK	9.11.42	Sher Singh	Spr	18.6.45
Laxman Borate	Spr	7.1.43	Phulan Singh	Spr	18.5.45
Mohd Islam	Spr	13.3.44	Pehtawan Khan	Spr	20.5.45
Narsing Chowan	LNK	26.10.44	Ramu Thomore	Spr	5.4.45
Kartar Singh	Spr	30.10.44	Rakha	Sweeper	28.6.45
Abdul Rehman	Spr	31.10.44	Allah Dad	Spr	28.6.45
Laxman Singh	Spr	31.2.44	Munsabdar Khan	Spr	28.6.45

Krishna Bhatuse	Spr	30.9.45	Mohd Khan	Nk	28.6.45
Pangaram More	Spr	31.10.45	Mehdi Khan	Spr	28.6.45
Mohd Akbar	Spr	28.6.45	Abdul Rehman	LNk	28.6.45
Jalal Khan	Spr	28.6.45	Nur Mohd	Spr	28.6.45
Allah Dad	Har	28.6.45	Thakar Singh	Nk	25.6.45

18 Field Company Africa 10.6.40 to 15.5.41, 8.6.41 to 11.7.41, 10.9.41 then PoW

Kari Singh	Nk	10.10.39	Parshan Singh	Spr	6.8.42
Kushnak Singh	Nk	20.9.40	Ujagar Singh	LNk	17.8.42
Gulab Khan	Spr	5.2.41	Puran Singh	LNk	17.8.42
Amar Singh	Spr	6.3.41	Dalip Singh	Spr	17.8.42
Phondu Shinde	Har	28.3.41	Bachan Singh	Spr	17.8.42
Niwarti Shinde	LNk	31.3.41	Jogindar Singh	Har	17.8.42
Babu Jadhav	Spr	4.4.41	Fauja Singh	Nk	17.8.42
Pharam Singh	Spr	17.6.41	Rawel Singh	LNk	17.8.42
Bhagat Singh	Spr	17.6.41	Santa	Sweeper	17.8.42
Keshav More	Spr	20.6.41	Tukaram Photre	Spr	25.8.43
Mohd Ashraf	LNk	22.6.41	Mohd Ali	Cook	31.8.43
Sadeshi Chingle	Spr	22.6.41	Yeshwant Bhoole	LNk	25.3.44
Amar Singh	Spr	22.6.41	Gurdao Singh	Spr	11.5.44
Gulabrao Jedhe	Spr	18.6.41	Puran Singh	Spr	11.5.44
Phazan Khan	Spr	21.9.41	Harichandaz	Bonbulwade	
			LNk		1.7.44

19 Field Company Malaya 8.12.41 to 15.2.42 then PoW

Amar Singh	LNk	24.12.40	Jawala Singh	Spr	11.3.41
Jugal Singh	Har	11.3.41	Fauja Singh	Spr	11.3.41
Pritam Singh	LNk	11.3.41	Amar Singh	Spr	11.3.41
Indar Singh	LNk	11.3.41	Boota Singh	Spr	11.3.41

Kazara Singh	Spr	11.3.41	Lachman Singh	Spr	12.3.41
Karbans Singh	Spr	11.3.41	Bhagat Singh	Spr	16.3.41
Samshez Singh	Spr	2.5.41	Tanaji Bane	Spr	25.2.44
Bhawana More	Nk	12.12.41	Sripal Baid	Spr	25.2.44
Inayat Khan	Spr	22.2.41	Parachuram Thakur	Spr	25.2.44
Mahadu Sakpal	Spr	19.1.42	Sadgar Singh	Spr	25.2.44
Mahadu Wagh	Spr	19.1.42	Kari Powar	Spr	25.2.44
Bhagwan Chowan	Spr	23.5.42	Thukuram Kadilkar	Spr	25.2.44
Sher Bahadur	Spr	15.2.43	Amrit Chowan	LNk	25.2.44
Teja Singh	Spr	25.2.44	Shankar Jadhao	Spr	25.2.44
Karnam Singh	Spr	25.2.44	Faru	Sweeper	25.2.44
Bhiva More	Spr	25.2.44	Krishna Powar	Bhy	25.2.44
Madhu More	LNk	25.2.44	Mahanbir	Barber	25.2.44
Narayan Shinde	Spr	25.2.44	Kussaini	Phobi	25.2.44
Maroti More	Spr	25.2.44	Narayan Bhoole	Spr	25.2.44
Babu Shinde	Spr	25.2.44	Piwan Ali	Spr	25.2.44
Shambhaji Shinde	Spr	25.2.44	Phanna Singh	Spr	13.10.44
Alba Sakhal	LNk	25.2.44	Jahan Dad	Spr	
Tukuram Piste	Spr	25.2.44	Milkha Singh	Spr	13.12.44
Tukuram Kadam	Spr	25.2.44	Narayan Chowan	Spr	5.8.45
Shankar Jadhao	Spr	25.2.44			

20 Field Company Africa September 1940 to September 1941 & April to September 1942

Burma November 1943 to January 1945 & March to September 1945

Govind Surve	LNk	2.11.40	Maroti Shinde	Spr	7.6.42
Kaka Singh	Nk	12.5.41	Bhagoji Sondkar	Spr	11.6.42
Kartar Singh	LNk	19.6.41	Jagannath More	LNk	23.7.42
Sardar Khan	Spr	31.8.41	Pattu Shinde	Spr	29.7.42
Padu Arkar	Spr	5.5.42	Alaf Khan	Spr	8.8.42
Alba Shinde	Spr	5.5.42	Jiwan Singh	Spr	15.8.42
Fateh Mohd	Masalchi	6.6.42	Vithal Gaikwad	Spr	31.8.42
Vithal Gilde	Spr	6.6.42	Thakar Singh	Nk	1.9.42

Alaf Pin	LNk	6.6.42	Mohd Uziz	LNk	15.10.42
Ennath Jadhao	Spr	7.6.42	Keshav Dhure	Nk	4.5.43
Appa Mane	Spr	7.6.42	Tulsa Singh	Spr	18.1.44
Daya Singh	Spr	11.6.44	Manaji Sakpal	Spr	29.3.45
Allah Pilla	LNk	28.6.44	Baburao Shinde	Spr	5.8.45
Balu Yadeo	LNk	21.7.44	Kera Banna	MD	8.10.45
Ramu Jadhao	Spr	4.8.44	Ghulam Farid	Spr	21.12.45
Karam Singh	Sub	24.10.44	Mohd Tajal	Spr	22.12.45
Laxman Bhosle	Spr	3.11.44	Krishna Salunke	LNk	30.12.45

21 Field Company Africa 22.9.40 to 27.11.41, January 42 to 17.7.42 & 25.1.43

to 12.5.43 Italy 30.12.43 to 8.5.45

Ratna More	Spr	9.11.40	Gurbachan Singh	Spr	12.6.42
Gurbakosh Singh	Spr	16.3.41	Ghulam Mohd	Spr	15.6.42
Bachan Singh	Spr	18.3.41	Mohar Pad	Spr	16.6.42
Ukhan Singh	Spr	22.3.41	Abdul Rehman	Spr	16.6.42
Mohd Aueaf	LNk	8.4.41	Sher Mohd	Spr	16.6.42
Shivram Barge	Spr	9.7.41	Jalal Pin	Spr	17.6.42
Mohd Sadiq	Spr	28.8.41	Krishna Magdun	Spr	29.6.42
Bur Singh	Spr	3.1.42	Puran Singh	WC	29.6.42
Malayat Khan	LNk	8.2.42	Amar Singh	LNk	6.7.42
Ali Ukbar	Spr	11.2.42	Amar Singh	Spr	17.8.42
Tajal Pad	Spr	21.2.42	Mam Raj	Sweeper	2.7.43
Ganpat Chowan	Jem	27.5.42	Ram Chandra Chowan	Spr	4.7.43
Ganpat Kadam	Spr	27.5.42	Chaman Khan	Nk	18.9.43
Tukaram Shellar	Spr	27.5.42	Mohd Sadiq	Spr	27.1.44
Rajaram Jadhao	Spr	27.5.42	Parshan Singh	Spr	27.1.44
Balu Kasekar	Spr	27.5.42	Joti Jadhao	Spr	25.2.44
Kaka Jadhao	Spr	27.5.42	Gangaram Bhosle	LNk	2.3.44
Sakharam Gotal	Spr	27.5.42	Barkat Ali	Hav	3.3.44
Yeshwant Khape	Spr	27.5.42	Nazir Alam	LNk	3.3.44
Raghunath Chowan	Spr	27.5.42	Ali Mohd	Spr	3.3.44
Bhagwanta Bhosle	Spr	27.5.42	Taqar Pin	Spr	3.3.44

Rambhau Landye	Spr	27.5.42	Nur Hussain	Nk	3.3.44
Laxman Kadam	Spr	27.5.42	Rehim Ali	Nk	3.3.44
Sripati Sawant	Spr	27.5.42	Jumma Khan	Spr	7.3.44
Banta Singh	Nk	7.3.44	Ganga Singh	Spr	3.8.44
Jagir Singh	Spr	6.7.44	Piwan Singh	Spr	28.9.44
Sarwan Singh	Spr	6.7.44	Muzafar Khan	Spr	1.10.44
Mukund Naik	Spr	13.7.44	Nanta Singh	Spr	2.10.44
Yeshwant Parab	Spr	13.7.44	Imrat Kanvillar	Jem	29.11.44
Tara Singh	Spr	24.7.44	Mohd Saman	Spr	28.7.45
Lal Singh	Spr	25.7.44	Ganpat Jadhao	Spr	25.10.45
Shamu Malavile	Spr				25.12.45

22 Field Company Malaya 8.12.41 to 15.2.42 then PoW

Krishna Shinde	Spr	11.12.41	Shacila Singh	Spr	25.2.44
Babu Rao More	Spr	11.12.41	Sadhu Singh	Spr	25.2.44
Keshav Kadam	Jem	31.12.41	Alma Singh	Spr	25.2.44
Ramchander Shinde	Spr	27.1.42	Sitararam Salvi	Spr	25.2.44
Azjan Singh	Spr	31.1.42	Natha Singh	Spr	25.2.44
Bhan Singh	Spr	31.1.42	Bachan Singh	Spr	25.2.44
Gul Mohd	Cook	12.2.42	Bakhtawar Singh	Spr	25.2.44
Abdul Ghani	Spr	18.9.42	Sardara Singh	Spr	25.2.44
Thakar Singh	Spr	3.10.43	Mohan Singh	Spr	25.2.44
Nazar Mohd	Spr	11.11.43	Karim Pad	B.M	25.2.44
Babu Singh	Spr	6.12.43	Madhuri MB	MD	27.8.44
Qurban Khan	Spr	17.1.44	Gurdial Singh	Spr	28.8.44
Ali Pad	Spr	25.2.44	Alkaram Sable	Spr	27.10.44
Surain Singh	Spr	25.2.44	Sakaram Powar	Masalehi	12.12.44
Banta Singh	Spr	25.2.44	Jowand Singh	Jem	8.6.45
Ram Singh	LNk	25.2.44	Shuttan	Sweeper	7.12.45

23 Field Company Malaya 8.12.41 to 15.2.42

Bela Singh	Hav	28.5.41	Ramchander Khandekar	Tailor	24.10.42
Piara Singh	Spr	26.6.41	Nur Illahi	Spr	19.1.43

Pandurang Bhagat	Spr	14.12.41	Zaman Ali	Spr	24.5.43
Fazand Ali	LNk	13.2.42	Santokh Singh	Spr	30.6.43
Mahadeo Uthav	Spr	18.9.42	Mahadeo Salunke	Cook	31.12.43
Sher Khan	Spr	2.10.42	Vasu Jadhao	Spr	30.3.44
Sher Mohd	Spr	25.2.44	Sohan Singh	Spr	9.4.44
Narajan Singh	Spr	25.2.44	Lachman Singh	LNk	19.5.44
Rattan Singh	Spr	25.2.44	Faizulla Khan	Spr	31.5.44
Amar Singh	Sweeper	25.2.44	Meja Singh	LNk	14.2.45

24 Field Company Burma 2.2.42 to 2.11.44

Nekiram	Spr	27.2.42	Gurdial Singh	Spr	4.4.42
Barkat Ali	Spr	27.2.42	Bhan Shirke	Spr	20.4.42
Balwant Singh	Spr	27.2.42	Ala Jadao	Spr	29.5.42
Paulat Singh	Sem	30.3.42	Mohd Hussain	Spr	10.7.42
Sundar Singh	Spr	30.3.42	Kartar Singh	Spr	28.7.42
Vilhu More	Spr	30.3.42	Rehamat Khan	WC	29.7.42
Mehar Din	Spr	30.3.42	Surain Singh	LNk	31.7.42
Bapu Jadhao	Spr	30.3.42	Kartar Singh	LNk	6.8.42
Kesar Singh	Cook	30.3.42	Indar Singh	Cook	3.12.42
Shripati Pongre	Spr	2.4.42	Khanwas Khan	Spr	18.2.43
Ram Singh	Spr	19.1.46			

24 Engineer Battalion Burma 24.12.43 to 26.8.44 & 23.12.44 to 2.9.45

Kariba Salunke	Nk	6.2.44	Mahar Singh	Spr	6.2.44
Mos. Lall	Phobi	6.2.44	Surain Singh	Spr	6.2.44
Rafi-ud Din	Kas	6.2.44	Karnam Singh	Spr	6.2.44
Babu Mane	Spr	6.2.44	Gungaba Jadhao	Spr	6.2.44
Munshi Singh	Spr	6.2.44	Sakaram Koli	Spr	6.2.44
Kariba Punde	Spr	6.2.44	Kazara Singh	Spr	6.2.44
Munsha Singh	Spr	6.2.44	Karnam Singh	LNk	18.2.44
Mohan Lal	Phobi	6.2.44	Dyanu Shinde	LNk	18.2.44
Pandurang Jadao	Spr	6.2.44	Gosinde Marathe	Spr	18.2.44
Sohan Singh	Nk	6.2.44	Ganpat Jadhao	Spr	18.2.44

Ganhera Singh	Spr	6.2.44	Sher Baz Khan	Spr	20.2.44
Jangir Singh	Spr	6.2.44	Phondu Sutar	Spr	29.2.44
Kehar Singh	Spr	6.2.44	Manohar Bamsing	Spr	20.6.44
Kesar Singh	LNk	6.2.44	Lal Singh	Spr	3.1.45
Mangal Singh	Spr	6.2.44	Ghulam Mustaf	Spr	14.7.45

25 Field Company Burma 14.1.45 to 2.9.45

Sakharam Gaikwad Spr 4.3.45

26 Field Company Burma 4.4.42 to 27.9.43

Mohd Sharif	Barber	17.12.42	Mohd Isa	Spr	4.4.43
Pira Singh	Spr	15.3.43	Yeshwant Chowan	Spr	10.4.45
Ganpat Badawat Spr 23.7.45					

27 Field Company Persia & Iraq 25.9.41 to 25.5.45

Amar Singh	Nk	22.10.41	Pandurang Jadhao	Spr	5.2.45
Kalandar Singh	Spr	3.11.44	Kalu	Sweeper	14.11.45
Dyanu Babar Spr 4.2.45					

28 Field Company Burma 4.3.42 to 20.10.44 & 1.1.45 to 20.6.45

Shankar Mane	Spr	21.8.45	Ujan Singh	Spr	2.1.46
Shirdea Singh	Spr	22.12.45	Madad Khan	LNk	26.9.46

29 Field Company Burma 16.10.44 to 2.9.45

Rasikumar Basawa					
	Cook	22.8.42	Allah Ditta	LNk	2.2.45
Mir Zaman	LNk	18.11.44	Jagir Singh	Spr	3.2.45
Mohd Sadiq	Spr	8.12.44	Rama Mohite	Spr	9.5.45
Jagat Singh	LNk	27.1.45	Babu Thorat	Spr	9.5.45
Dial Singh	Spr	30.1.45	Bhikaji Sakpal	Spr	9.5.45
Joginder Singh	Spr	30.1.45	Dagdu Bhatuwa	Spr	9.6.45

9 Bridging Platoon Burma July 1942 to May 1945 & November 1943 to 2.9.45

Mohd Islam Spr 12.5.44

4 Division Engineers Africa 10.6.40 to 12.5.43 & Italy 30.11.43 to 8.5.46

Defence 22.9.39 to 9.6.40, 13.5.43 to 29.11.43 & 9.5.45 to 2.9.45

Mur Khan Spr 22.3.44 Abdul Aziz Spr 22.3.44
Abdul Aziz WC 22.3.44

3 Bridging Platoon Persia & Iraq 14.11.41 to 14.10.44
Karam Din Spr 7.2.44

596 Independent Engineer Company Ceylon 5.7.44 to 11.3.45
Rup Singh Spr 4.9.44

595 Independent Engineer Company Ceylon 9.1.44 to 3.10.44 & 17.2.45 to 4.8.45
Maстан Singh Spr 16.6.44

496 Pipe Line Operating Company Burma 22.5.44 to 2.9.45
Sher Singh Hav 10.1.46

495 Pipe Line Operating Company Burma 21.5.44 to 2.9.45
Wassan Singh Spr 6.2.45

494 Pipe Line Operating Company Burma 23.11.43 to 2.9.45
Chhrajji Bhingare LNK 5.4.44 Mohd Nasik Spr 18.2.44

485 Field Company Burma 9.5.45 to 18.6.45
Ishar Singh Spr 26.11.44 Mangat Rao Umble LNK 6.5.45
Mir Haidar Shah NK 27.2.46

483 Field Company Burma 17.5.43 to 6.6.45
Mohd Alkbar CNM 26.3.44

411 Parachute Squadron Burma 5.3.44 to 5.8.44 & 13.4.45 to 26.5.45
Bordu Sweeper 13.4.44 Pinkar Jagtap NK 23.5.44
Ali Khan NK 3.8.44

481 Field Company Burma 5.3.44 to 5.8.44 & 13.4.45 to 26.5.45

Anant Dalvi	Spr	10.6.43	Mohd Alam	LNK	11.6.44
Suka Wagh	Spr	13.6.43	Mohd Yakub	Spr	11.6.44
Sitararam Panjale	Spr	5.7.43	Mohd Sadiq	Spr	11.6.44
Pharmalingam	Sweeper	10.10.43	Said Mohd	Spr	11.6.44
Ramkrishna Shinde	Spr	23.3.44	Sultan Mohd	Spr	11.6.44
Said Alkbar	Spr	11.6.44	Suleman	Cook	11.6.44
Fazal Din	Spr	11.6.44	Mohindar Singh	Spr	30.9.44
Godar Khan	Spr	11.6.44	Gian Singh	Spr	11.12.44
Mantha Singh	Spr	11.6.44	Karnam Singh	Spr	19.12.44
Nek Mohd	LNK	11.6.44	Kewal Ram	RFCook	25.12.44
Albas Khan	Spr	11.6.44	Puran Singh	Spr	16.2.45
Bagga Khan	Spr	11.6.44	Sariah Singh	Spr	16.2.45
Chandri Khan	Spr	11.6.44	Dalip Singh	Spr	4.7.45

Jodi Mandal Sweeper 11.6.44

402 Field Company Burma 16.6.43 to 13.8.44 & 28.12.44 to 2.9.45

Mirza Khan	LNK	9.10.43	Kesho Bodke	NK	28.4.44
Inayat	Spr	18.4.45			

401 Field Squadron Burma 29.9.43 to 12.7.45

Surjan Singh	Spr	25.6.43	Sher Mohd	Hav	21.11.44
Ganpat Sawant	LNK	3.2.44	Kaka Khan	Spr	26.11.44
Bhagwan Ukarde	LNK	12.7.44	Kaji Mohd	Spr	28.2.45
Umararam More	Spr	26.10.44	Rehmat Khan	LNK	27.3.45
Rangrao Dubal	Hav	26.10.44	Barkat Ali	Spr	29.3.45
Dadgu Filekar	Spr	26.10.44	Paula Jamle	Spr	15.4.45
Shamrao Katle	Spr	26.10.44	Phaku Gadhao	Spr	15.4.45
Bhau Powar	Spr	26.10.44	Ali Mohd	Spr	11.5.45
Jagnath Wagh	Spr	26.10.44	Ali Alkbar	Spr	11.5.45
Babu More	Spr	27.10.44	Mahadeo Begal	Spr	21.4.46

363 Field Company Burma 27.5.43 to 15.8.44 & 25.12.44 to 2.9.45
 Prilam Singh Spr 30.1.45 Ganda Singh Nk 6.4.45
 Krishnarao Bhagat Jem 8.5.46

329 Field Park Company India Command 1.12.42 to 1.10.46
 Waman Jagdale Spr 27.5.45 Maroti Dainphode LNK 2.9.45

328 Field Park Company Burma 7.5.43 to 8.6.45
 Laxman Wagh Spr 15.1.45 Bahadur Singh Spr 26.3.46
 Arjun Phorpade Spr 27.5.46

324 Field Park Company Burma 29.5.44 to 12.5.45
 Sittaram Utekar Spr 21.5.43 Shangara Singh Spr 25.1.45
 Lal Singh Spr 25.1.45 Amar Singh Spr 3.5.46
 Shankar Jadhao Spr 19.12.46

305 Field Park Company Burma 8.5.42 to 2.9.45
 Nawab Pin Spr 14.1.46

301 Field Park Company Africa 21.4.43 to 12.5.43
 Italy 12.11.41 to 20.4.43, 7.9.44 to 8.5.45 & 9.5.45 to 2.9.45
 Mohd Khan Spr 20.4.45 Mohd Hussain Spr 13.9.46
 Idur Khan Spr 15.4.46

15 Bridging Platoon Burma 13.3.43 to 2.9.45
 Dhondiba Gaikwad Spr 18.3.44 Gulzar Singh Spr 25.11.44

9 Division Engineers Malaya 8.12.41 to 15.2.42 then PoW
 Khan Bahadur LNK 14.10.42 Iman Pin LNK 7.2.43
 Abdulla Khan LNK 30.6.44

11 Division Engineers Malaya 8.12.41 to 15.2.42 then PoW
 Shankar Kadam Spr 21.1.42 Bhima Karale Spr 25.6.45

889 Bridging Platoon India Command 15.4.44 to 30.12.44
 Mohd Khan Spr 4.1.44

20 Division Engineers Burma 19.10.43 to 2.9.45, Defence 26.6.42 to 26.7.43
 Keshavrao Shinde Spr 17.8.45

203 Field Broadcasting Unit Burma 24.10.43 to 27.5.44
 Nana Sawant Spr 16.6.44

215 Field Stores Platoon Burma 24.11.44 to 2.9.45
 Rulda Singh Nk 2.11.44

629 Army Troops Engineers (36 Division Engineers) Burma 3.3.44 to 8.5.45
 Ramu Jadhao LNK 7.4.45

217 Field Stores Platoon Burma 25.1.45 to 14.7.45
 Sadhu Singh HavC 25.3.46

201 Field Broadcasting Unit Burma 24.10.43 to 27.5.44
 Abdul Rehman Spr 27.8.44

12 Bridging Platoon Burma 1.2.42 to 10.9.46
 Sampuran Singh Spr 31.1.45

49 Army Troops Company Persia & Iraq 3.9.41 to 15.8.45
 Krishna Kamse LNK 16.12.41 Prilam Singh HavC 28.8.42
 Karam Singh Spr 17.2.42 Ganda Kalthar Spr 6.9.45

91 Field Company Burma 28.5.42 to 12.12.44
 Ghulam Nabi Spr 16.12.42 Prilam Singh Spr 9.9.43
 Fazal Hussain LNK 23.7.43 Puzan Singh LNK 6.1.44
 Waman Sawant LNK 26.7.43 Mohd Niwar Spr 31.1.44
 Amar Singh Jem 2.9.43 Bhairu Surjawanshi Spr 7.3.44

Jagat Singh	Lt	2.9.43	Uta Mohd	Spr	21.12.44
Karchand Singh	Lt	2.9.43	Sher Mohd	Spr	11.6.46
Maula Dad	Spr	27.12.44	Mohd Zaman	Spr	11.6.46
Sadas Shiv Patil	Spr	24.12.45	Kala Khan	Spr	31.10.46
Mir Ahmed Khan	Spr	11.6.46	Nanrang Singh	Spr	2.12.46
Mukhtiar Ali	Lt			11.6.46	

92 Field Company Burma 4.7.42 to 14.7.43 & 15.11.43 to 2.9.45

Bhag Singh	Spr	6.11.42	Lal Khan	Spr	8.5.44
Ishar Singh	Spr	1.4.44	Miar Mohd	Spr	3.9.44
Shaukat Ali	Lt	24.4.44	Fateh Ali	Lt	19.10.44
Vithal Kiralkar	Lt	8.5.44	Subbanrao Jadhav	Spr	17.2.45
Bapu Kalal	Spr	8.5.44	Ahmed Noor	Spr	27.2.45
Sadas Shiv Rane	Spr	8.5.44	Pritam Singh	Spr	16.6.45
Ajmer Singh			Nil		25.10.45

93 Field Company Burma 28.3.44 to 11.4.45

Samhu Oekar	Spr	4.3.45	Mohd Hussain	Spr	6.6.46
Narayan Kondilkar	Spr	4.3.45	Phondi Khawinkar	Lt	14.6.46
Pandu Patil	Spr				1.7.46

96 Field Company Burma 1.1.45 to 2.9.45

Mugut Rao Kaple	Spr	12.4.45	Jaganath Chowan	Spr	18.12.45
Rehmat Khan	Spr	13.4.45	Bawa Singh	Spr	29.12.45
Phulam Isca	Spr	10.7.45	Rajendra Jadhao	Spr	10.7.46

97 Field Company Italy 23.10.42 to 3.2.44, 4.2.44 to 8.5.45 & 9.5.45 to 2.9.45

Anna Suryawanshi	Lt	22.8.43	Narajan Singh	Spr	19.7.44
Paya Singh	Spr	29.1.44	Pandu Singre	Spr	23.8.45

99 Field Company India Command 1.2.43 to 2.6.45

Parman Gaur	Spr	18.8.43	Boston Khan	Lt	18.5.45
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98 Field Company Burma 27.4.43 to 2.6.45

Mohd Sharif	Barber	21.8.43	Lakh Singh	Lt	25.6.44
Anayat Ullah	Spr	27.4.44	Mohd Kayat	Spr	18.6.44
Gulab Thape	Spr	16.6.44	Maula Bax	Lt	6.10.44
Mohd Zaman	Spr	10.4.44	Nadan Khan	Spr	6.10.44
Para Singh	Spr	17.10.44	Abdul Karim	Spr	27.1.45
Milkha Singh	Spr				27.7.46

37 Field Squadron Burma 12.11.44 to 21.6.45

Puran Singh	Spr	11.10.44	Nazar Singh	Spr	30.9.45
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45 Army Troops Company Malaya 8.12.41 to 15.2.42 then PoW

Nana Kuchekar	Spr	30.10.41	Sohan Singh	Spr	25.2.44
Umar Singh	Lt	28.12.41	Karam Singh	Spr	25.2.44
Lal Singh	Lt	28.12.41	Chanan Singh	Spr	25.2.44
Ganpat More	Lt	25.1.42	Mohindar Singh 652	Spr	25.2.44
Madhu Bhosle	Spr	12.2.42	Mohindar Singh 069	Spr	25.2.44
Sitaram Sawant	Spr	17.2.42	Bhagar Singh	Spr	25.2.44
Bhagwan Mane	Lt	19.2.42	Gulzara Singh	Spr	25.2.44
Ramu Sudekar	Spr	15.7.42	Umar Singh 392	Spr	25.2.44
Maroti Waldekar	Spr	30.7.42	Phira Singh	Spr	25.2.44
Popal Rao Nikam	Spr	7.8.42	Puran Singh	Spr	25.2.44
Piraji Satale	Spr	29.8.42	Umar Singh 906	Spr	25.2.44
Kartar Singh	Spr	30.11.42	Jimi	Lt	25.2.44
Kirpal Singh	Spr	29.3.43	Ranjit Singh	Lt	25.2.44
Mehar Singh	Spr	30.3.43	Gulzar Khan	Spr	16.7.44
Bela Singh	Spr	3.4.43	Bal Krishna More	Lt	21.8.44
Mohd Sharif	Spr	2.7.43	Bachan Singh	Spr	29.8.44
Tulsa Singh	Spr	28.12.43	Narayan Sawant	Lt	31.8.44
Mohd Sher	Spr	25.2.44	Pandurang Chowan	Spr	6.10.44
Post Mohd	Spr	25.2.44	Raghu Umbre	Spr	25.10.44
Bahadur Singh	Spr	25.2.44	Ananda Surwase	Lt	4.11.44
Sarup Singh	Spr	25.2.44	Phaku Kadam	Lt	3.1.45

Surjan Singh	Spr	25.2.44	Krishna Jagdale	Spr	22.5.45
Gurbaksh Singh	Nk	25.2.44	Nana Sakpal	Spr	30.6.45
	Ram Singh		Spr	25.2.44	

42 Field Park Company Malaya 8.12.41 to 15.2.42 then P.O.W.

Qurban Ali	Spr	25.1.42	Raj Wali	L.Nk	31.1.42
Mohdi Hussain	Spr	31.1.42	Mohd Khan 468	Spr	14.2.42
Mohd Saffi	Spr	15.4.42	Shah Wali	Spr	25.2.44
Mohd Afzal	L.Nk	30.9.42	Alam Shah	Spr	25.2.44
Mohd Khan 403	Spr	9.10.42	Mir Saman	Spr	25.2.44
Bashir Ahmed	Hav C	15.12.42	Mohd Bhrasf	Spr	25.2.44
Waras Khan	L.Nk	10.5.43	Abdul Kamid	Spr	25.2.44
Lappan	B.T Cook	10.5.43	Allah Dad	Spr	25.2.44
Mohd Khagam	L.Nk	7.6.43	Mohd Sharif	Nk	25.2.44
Fazal Din	Sub	25.2.44	Post Mohd	L.Nk	25.2.44
Surfaraz Khan	L.Nk	25.2.44	Mohd Hussain	Spr	25.2.44
Sher Mohd	Spr	25.2.44	Rehmat Khan	Spr	25.2.44
Ali Yar Khan	Spr	25.2.44	Ghulam Nabi	Spr	25.2.44
Mohd Bashir	L.Nk	25.2.44	Ghulam Rasul	Spr	25.2.44
Ali Baksh	Spr	25.2.44	Karam Din	Spr	25.2.44
Gulab Din	Spr	25.2.44	Rehmat Ali	Spr	25.2.44
Ismail Khan	Spr	25.2.44	Fida H Shah	Spr	25.2.44
Abraham	Spr	25.2.44	Shao Din	Spr	25.2.44
Jahan Dad	Spr	25.2.44	Allah Pilla	Spr	25.2.44
Rehim Dad	Spr	25.2.44	Ali Dad	Spr	25.2.44
Bostan Khan	Hav	25.2.44	Jamu	Sweeper	25.2.44
Ghulam Rasul	Spr	25.2.44	Mohd Afzar	B.M	25.2.44
Mohd Nazir	Spr	25.2.44	Mohd Sadiq	Spr	25.2.44
Mohd Akbar	Spr	25.2.44	Nur Khan	Spr	25.2.44
Sadiq H Shah	Spr	25.2.44	Karam Khan	Spr	25.2.44
Bostan Khan	Spr	25.2.44	Ghulam Sarwar	Spr	25.2.44
Arshad Ali	Spr	25.2.44	Sheikh Fateh Mohd	Spr	25.2.44
Mohd Hasan	Spr	25.2.44	Mohd Shah	Spr	8.6.44

Fateh Mohd	Spr	25.2.44	Allah Dad	Spr	21.9.44
Manzam Shah	Spr	25.2.44	Sha N Baz Khan	Spr	30.1.45
	Mohd Khan		Spr	25.2.44	

30 Field Company Burma 22.2.41 to 8.5.45

Shankar Sarangle	Spr	31.10.43	Lachman Singh	Spr	8.4.44
Krishna Raul	Spr	19.2.44	Shabal Shah	Spr	21.5.44
Mohd Khan	Spr	21.5.44	Rehmat Ali	Spr	3.3.45
Rulda Singh	Spr	10.10.44	Mohd Ramzan	L.Hav	10.3.45
Unkush Chowan	Spr	14.11.44	Bapu Saheb Bhosle Hav		17.3.45
Begaji Shinde	Spr	20.11.44	Surdial Singh	Spr	11.8.45
Ragnunath Mane	Spr	9.2.45	Nasib Singh	Spr	11.8.45
Jaisingh Theodore	Nk	9.2.45	Didar Singh	Spr	11.8.45
Shankar Kadam	Jem	11.2.45	Tara Singh	Spr	11.8.45
Sidhu Dambhe	Spr	12.2.45	Pandurang Kadam	Spr	11.8.45
Sadiq Ali	Spr	14.2.45	Adalat Khan	Spr	11.8.45
Fazal Hussan	Spr	20.2.45	Mohd Nasim	Spr	11.8.45
Shah Mohd	Spr	28.2.45	Nama Morange	Spr	29.8.45

The Roll has been copied from the Kirkee War Memorial and is believed to be the full list of deaths during the period covered by this history.

Abbreviations appearing are

Bhy and WC	Bhisti (water carrier)
MW	Mess Waiter
B.M	Mochi (shoemaker)
B.T Cook	British Troops Cook
Hav C	Havildar Clerk

GLOSSARY

2IC	Second in Command
AA & QMG	Assistant Adjutant and Quartermaster General (Lt Col appointment)
AB	Airborne
Abad	Cultivated, prosperous
Abad karna	To cultivate, to make a place prosperous
AFNEI	Allied Forces Netherlands East Indies
AFV	Armoured fighting vehicle
AGRE	Army Group RE or IE of two or more Lt Col commands
AHQ	Army Headquarters
ALFSEA	Allied Land Forces South East Asia
ALG	Advanced landing ground
Alligator	Amphibious vehicle with tracks
AMU	Anti-malaria Unit
AP	Anti-personnel
ARC (mesh)	Square mesh steel reinforcement, often used for surfacing temporary roads
ATE	Army Troops Engineers
Ata	Flour
AW	Artisan Works (as in AW Company)
Bahadur	Second class Officer of Order of British India
Bailey	Highly successful type of equipment bridging used extensively during and after WW2
Balli	Timber Balk
Bandobust	Organisation
BAOR	British Army of Occupation on the Rhine
Basha	Rough shelter made out of local materials
BCOF	British Commonwealth Occupation Force, as in Japan
BD	Bomb Disposal
Bergen	Rucksack
Bhang	Hemp (narcotic)
Bhidi or Biri	Hand-rolled cigarette
Bhy (bhisthy)	Water-carrier, one of the non-combatant camp followers
BISCUIT	Scheme for repatriation of British Service personnel after partition irrespective of time overseas
Bithess	Bitumenised hessian strip, for surfacing airfields and roads
BM	Brigade Major
BMA	Beach Maintenance Area
BMH	British Military Hospital
BRICOSAT	British Commonwealth sub-area, Tokyo
BRINDIV	British/Indian Division, part of BCOF Japan
BRITCOM base	British Commonwealth base (for BCOF Japan)
Bund	Earth wall, often retaining
CBE	Commander of the Order of the British Empire
CGI	Corrugated galvanised iron
Cha	Tea
Chapli	Sandal
Chatai	Earthenware porous jug
Chaung	Stream
CHM	Company Havildar Major
Chota hazri	Breakfast
CIGS	Chief of the Imperial General Staff
CIH	Central Indian Horse

CIMP	Corps of Indian Military Police
CI	Class as used to describe maximum load in tons capable of being carried by a raft or bridge eg CI9
CO	Commanding Officer, the title given to a Lt Col in command of a unit
CQMH	Company quartermaster havildar
CRA	Commander, Royal Artillery
CRE	Commander Royal Engineers (applied also to Lt Col commanding Indian Engineers)
CTE	Corps Troops Engineers
Dacoit	Indian or Burmese bandit
Dannet	Concertina coils of barbed wire
Dasehra	Hindu festival of lights
DC	District Commissioner
DCRE	Deputy Commander Royal Engineers - a major's appointment in the RE Works Services organisation usually controlling works in a District
DG	Dragoon Guards
Dhobi	Laundry
Double/double (DD)	Bridge (usually Bailey) having a double truss of double-storey construction on each side
Double/single (DS)	As above but of single-storey construction
DUKW	Amphibious lorry
Dumdum	Soft-nosed bullet which expands on impact
Dushman	Enemy (Urdu) ie German
EA	Eastern Army
EFI	Expeditionary Force Institute
E&M	Electrical and Mechanical
ENSA	Entertainment National Service Association
EOTS	Engineer Officers Training School
ERD	Emergency Reserve Decoration
ESD	Engineers Stores Depot
FAE	Forward Airfield Engineers
FANY	First Aid Nursing Yeomanry - a womens' corps originally formed to drive ambulances but also employed on cypher and similar classified duties and subsequently sometimes employed on welfare work
Fascine	Large bundle of faggots used to help tanks across ditches
FBE	Folding Boat Equipment
FE	Field Engineer - an officer on the CRE's staff who carried out recces, FE2 (a captain) and FE3 (a subaltern)
FSD	Field Supply Depot
Gabion	Wire basket filled with stones to form a large building brick
GOC	General Officer Commanding
Godown	Warehouse or store
GPT	General purpose transport
GR	Gurkha Rifles
GREF	General Reserve Engineer Force
GSO1	General Staff Officer 1st Grade (Lt Col appointment)
Gurdwara	Sikh temple
Halel	Muslim method of killing meat
Hamilton	A type of bridging equipment
Hav	Havildar (Sergeant)
Hav Maj	Havildar Major (senior NCO appointment)
HBTID	Homeward Bound Trooping Depot - transit camp where troops being repatriated were collected whilst awaiting troopships back to UK

Masjid	Muslim mosque
Maulvi	Hindu priest
MBE	Member of the Order of the British Empire
MC	Military Cross
ME	Mechanical excavating
MES	Military Engineering Services
MID	Mentioned in Despatches
MM	Military Medal
MMG	Motor Machine Gun
MP	Military Police
MS	Milestone
MT	Motor Transport
Munshi	Teacher
NAAFI	Navy, Army and Air Force Institutes - an organisation for running troops canteens, officers' clubs etc for British servicemen outside India
NCAC	Northern Combat Area Command
NEI	Netherlands East Indies, now Indonesia
Nissen	Wartime semi-circular in section hut clad in CGI sheeting, erected on a concrete base
Nk	Naik (Corporal)
NOIC	Naval Officer in Command
NTR	Nothing to report
OBI	Officer of the Order of British India (usually reserved for VCOs)
OC	Officer Commanding, usually at company level
OCTU	Officer Cadets Training Units
OFD	Ordnance Field Depot
Pagri	Turban, worn in different distinctive by the RBS&M classes
Pakora	Savoury titbits
Palla	Fringed red flap worn on the left side of the pagri
Panjis	Obstacle of bamboo stakes driven into the ground with sharp points uppermost
Para	Parachute (as in Para Brigade)
PBS	Pre-bitumised (hessian) used for surfacing airstrips
Pdr	Pounder - artillery by the weight of its shell eg 25pdr
PE	Plastic explosive
PLO	Pipeline Operating (fuel)
POL	Petroleum oil and lubricants
PM	Punjabi Musalman
PoW	Prisoner of war
Prahu or prahau	Malay boat with triangular sail and canoe-like outriggers
Psi	Pounds per square inch (pressure)
PSP	Pierced steel planking, interlocking steel planks pierced for lightness, used to strengthen air strips by spreading the load
PVC	Post independence Indian Army highest award for bravery
PWD	Public Works Department
PYTHON	Scheme for repatriation of British personnel after an overseas tour, initially 4 years, later reduced to 3
QAIMNS	Queen Alexandra's Imperial Nursing Service
Quad	A lightly armoured vehicle used to tow guns
QVOM	Queen Victoria's Own Madras (S&M)
RAE	Royal Australian Engineers
Raj Rif	Rajputana Rifles
RAMC	Royal Army Medical Corps
Ram ram	Mahratta greeting
RAP	Regimental Aid Post

RAPWI	Released allied prisoners of war and detainees
RC	Reinforced concrete
RCT	Royal Corps of Transport
Recce	Reconnaissance
Reft Off	Reinforcement Officer
RIASC	Royal Indian Army Service Corps
RIN	Royal Indian Navy
RM	Royal Marines
RMR	Royal Marines Reserve
RNR	Royal Naval Reserve
RSJ	Rolled steel joist
RTR	Royal Tank Regiment
RV	Rendezvous
SAA	Small arms ammunition
SACSEA	Supreme Allied Commander, South East Asia
Sangar	Breastwork, usually of stones or sandbags, providing protection from enemy fire
SB	Sardur Bahadur, a title given to holders of the OBI First Class
SBG	Small box girder
SCAP	Supreme Allied Commander, Allied Powers
SDF	Sudan Defence Force
SEAC	South East Asia Command
SEATIC	South East Asia Technical Intelligence Centre
SEWLROM	Special end of war leave for regular officers and men (28 days - usually taken with disembarkation leave on Python)
SGSW	Salt-glazed stoneware; drainpipe used in foul drains
SME	School of Military Engineering
Spr	Sapper
SSBB	Single/single Bailey bridge
Sub	Subedar (Senior VCO in a company)
Sub Maj	Subedar Major (Senior VCO at battalion or regiment level)
Tamasha	Party
TSBB	Triple/Single Bailey bridge
TTBB	Triple/triple Bailey bridge
VCO	Viceroy's Commissioned Officer
VE Day	The day hostilities ceased in Europe (9 May 1945)
VJ Day	The day hostilities officially ceased in the war against Japan (15 August 1945)
Wks Bn	Works Battalion
WW2	World War Two

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